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ARCHAISM IN HITTITE

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[The author argues that Hittite is not a continuation of Indo-European, but that both Indo-European and Hittite are developments of one and the same language, which he terms Indo-Hittite. The basis of the argument is that there are a number of phenomena in which Hittite is more archaic than Indo-European.]

Following a suggestion of Forrer's I have for several years held that Hittite separated from the Indo-European parent speech earlier than any of the previously known Indo-European languages.¹ If this position is accepted it is logically necessary to assume a stage of the parent speech more ancient than our reconstructed IE, for the reconstruction of which primitive IE and Hittite are the available sources. I have called this earlier stage Indo-Hittite.

It does not necessarily follow, however, that the attempt to reconstruct IH will be scientifically fruitful; that will depend chiefly upon the number and extent of the changes that prove to have occurred in the pre-IE period, or, in other words, upon the extent of the difference between primitive IE and primitive IH.

This seems to be approximately the point of view of two scholars who have recently discussed the question, namely Meillet and Petersen. Meillet² holds that Hittite was one of the first of the known languages to break away from the parent stock, but for him Tokharian, Armenian, Italo-Celtic, and perhaps Indo-Iranian went their separate ways at practically the same time; if he should reconstruct an additional parent speech he would presumably use as coordinate sources Hittite, Armenian, Italo-Celtic, Indo-Iranian, and the combined evidence of the remaining IE languages. He does not, however, propose any such task, no doubt because he considers the differences from our reconstructed Primitive IE unimportant.

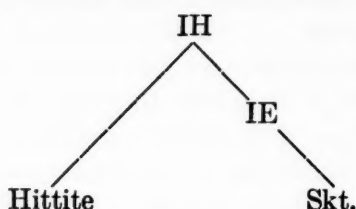
¹ See Forrer, *Mitteilungen der Deutschen Orient-Gesellschaft* 61.26; Sturtevant, *LANG.* 2. 25-34, *TAPA* 60. 25-37.

² *BSL* 32. 1-28 (1931).

Petersen³ believes that 'Hittite separated before a number of changes took place in the other IE languages', but he objects to the method of reconstructing IH that I have employed as giving disproportionate weight to the Hittite evidence. I have not, as he seems to think, assumed 'that wherever Hittite stands alone the other languages were the innovators.' On the contrary, it was precisely in order to account for the disproportionate amount of innovation in Hittite that I was first attracted to Forrer's hypothesis. If Hittite began its separate development before Skt., Gk., or Lat. began theirs, it becomes less surprising that in some respects that language of our group of which we have the most ancient records is the most fundamentally altered of all the ancient languages. It is true that I have been chiefly interested in finding old material in the Hittite documents, and it is likely that I have been too enthusiastic in heralding the newly discovered evidence. On that point I shall not attempt any defense.

A more fundamental criticism of my method is implied in this remark of Petersen's (194): 'One may go a step farther, and say that unless clear and certain examples of Hittite retaining a pre-Indo-European phenomenon are much more frequent than now known, the probability is much greater that in case of a form not readily interpreted Hittite is the innovator.'

I cannot quarrel with this. Although our Hittite documents furnish an earlier written record than we possess for any IE language, it cannot be maintained that they carry us back to a much earlier form of speech than that presented by the RigVeda. Roughly Hittite and Skt. are of equal date; and so if we construct their genealogical tree on the basis of the IH hypothesis, it must look something like this:



Obviously we must expect to find less extensive change between IH and IE than between IH and Hittite. Nevertheless it is a question to be determined by the evidence. In this paper I want to bring together the clearest cases in which Hittite preserves features more archaic than

³ AJP 53. 193-212 (1932).

the corresponding features to be inferred for primitive IE by the comparison of the IE languages.

Of the five that I presented in my former paper, I must apparently withdraw one. Petersen shows that there are many possible explanations of the Hittite verb forms, and consequently, that proof of any particular one is difficult. It is still my opinion that the Hittite medio-passive is in general far more archaic than that of any IE language or of primitive IE itself, but the case is not clear enough to be used as evidence for the IH hypothesis. There remain these four previously presented archaisms.

(1) Most significant is the retention of a sound that has been lost in all the related languages. This sound is written by the same signs as the Accadian spirant which is usually transliterated *ḥ*. It occurs for example in *hanti* 'in front' = Gk. *ἄντι*, *eshar* 'blood' = Gk. *ζαρ*, *nehhi* 'I lead, turn' = Skt. *ninaya*. Petersen is not impressed by this point, since he thinks it likely that *h* is of various origin, and in particular that after the vowel *a* it is probably a mere hiatus-filler, as *w* certainly is after *u*. He thinks that *h* is written 'almost regularly' after *a*, but scarcely ever after *u*. As a matter of fact *h* after *u* is not rare; a number of instances are recorded in my Glossary and there are many besides. A typical instance is *suhhai* 'sprinkles' and the related *suhhas* 'roof'. It is true that there are no certain instances of hiatus after *a*, for the simple reason that it is always possible to read *au*, *ai*, and *ae* as diphthongs. Clear instances of *a* immediately before originally heterosyllabic *e* are presented by such verbs as *tar-ma-iz-zi* 'he delimits' = Lat. *terminat*; for this comes from IH *termnāyeti* with loss of *y* before *e*, whether the Hittite word is to be pronounced as a dissyllable or as a trissyllable. The Hittite material itself gives no reason for suspecting a composite origin of *h*; since the sound always corresponds to zero in the IE languages, we know nothing whatever of its origin.⁴

The use of the same cuneiform characters as for Accadian *ḥ* proves a certain similarity between the sounds; Accadian *ḥ* was probably a palatal spirant more or less like German *ch*. But the Hittite sound must have differed from the Accadian, for it tends to be written double between vowels. All the Hittite consonants are sometimes written double, but only two of them prefer that orthography; intervocalic *z* is written double two or three times for one single writing, while double *h* is more than eight times as frequent as single *h* between vowels. Since there is no such tendency in Accadian, the double writing must indicate some

⁴ See JAOS 50. 125-8.

difference in sound, and doubling can only indicate a sound of greater length or greater prominence of some sort. In harmony with this conclusion is the fact that Hittite *h* is as regularly written as any consonant in the language; *w* after *u* and *y* after *i* are freely omitted (*a-as-si-ya-an-za* = *a-as-si-an-za* 'loved'), but *h* if ever written in a given word is always written (barring a few obvious blunders), except where we must assume a regular loss of the sound.

Whatever the source or sources of Hittite *h*, it was as clearly felt a phoneme as any in the language, and it frequently occurs in words whose IE etymology is beyond dispute. Furthermore, IE sometimes shows traces of its former presence; for in IH an original long vowel before *h* and a vowel was permanently shortened, while in IE there was compensatory lengthening upon loss of *h* before a consonant.⁵

(2) Petersen (197₁₃) accepts my demonstration⁶ that original *uw* and *aw* became *um* in IH, thus creating certain pairs of suffixes beginning with *w* or with *m* according to the character of the preceding vowel. Hittite has preserved the original distribution of these, but all of the IE languages have pretty thoroughly obliterated it, except that Indo-Iranian has numerous traces of the original distribution of the suffixes *mant* and *vant*.

(3) Hittite has no pronoun corresponding to the IE stem *to-*. Instead it has a sentence connective *ta* (IH *to*), which is frequently combined with a form of the enclitic pronoun *-a-* (IH *-o-*) 'he, she, it'; e.g. *tan* 'et eum'. This I trace to IH *tom*, assuming either that it contains zero grade of the connective **to* or that the vowel of **to* was elided in the phrase. In all the IE languages the descendants of acc. s. **tom* and of the related case forms function as indivisible wholes; but I find a trace of the original value of the sentence connective **to* in the tendency of the 'article' to take the initial position in early Skt., Gk., and Germanic. Petersen (194₄) objects that while Hittite shows nom. masc.-fem. *tas* 'et is', the IE languages show here the forms **so* and **sa*. He correctly remarks that 'it is inconceivable that such an irregular paradigm should have won out in the entire IE territory after regular paradigms were in existence'. Hittite *tas* 'et is' must be an innovation; evidently IH did not combine the connective **to* with nom. sing. **-os* 'is' (probably no such nominative existed). Possibly the pronoun **so* was confined to the nom. sing. (masc.-fem.) as it was in Skt. and Gk.; but it may have had other cases also as it has in Hittite and in Latin.

⁵ See LANG. 7. 115-24.

⁶ AJP 50. 360-9.

(4) The IE languages show extensive remains of a type of neuter nouns with final *r* in nom.-acc. sing., and with *n* before all case endings; but no IE language exhibits the declension in anything but a moribund condition. It goes without saying that *r/n*-stems must once have been more numerous and more vigorous than they appear in any IE language. This may have been the condition in primitive IE, although the extensive decay of the type in all eight branches suggests that the process probably began in the parent speech itself. In Hittite the *r/n*-stems are numerous and functionally important. From any verb in the language may be formed a verbal noun ending in *war*, *mar*, or *tar*, and the first two of these are certainly old, since they are clearly identical with the IE infinitive suffixes *wen* and *men*.⁷ I do not see how anyone can doubt that this state of affairs is far more primitive than anything that could be inferred from the *r/n*-stems of the IE languages.

In addition to this evidence Meillet and Petersen suggest three additional Hittite archaisms.

(5) Meillet⁸ has shown that in primitive IE the feminine gender was marked in only a few types of noun, and that the mechanism for expressing it had not been reduced to a system. If the development in pre-IE was in the same direction as in the succeeding epoch, there must have been a time when the feminine did not exist at all.

In Hittite there is no feminine gender, but merely a distinction between animate and inanimate or neuter in the nom. and acc. If the feminine is of relatively recent origin in IE we clearly have an archaism here. And even if we assume for all the pre-IE centuries such a condition as Meillet establishes for primitive IE, Hittite still stands alone in the nature of its evidence, unless it be for Armenian. Everywhere else the gender system became more firmly established after the close of the IE period, although in historic times it has been weakened or lost in various languages. In Hittite and Armenian alone there is no evidence of any development of the feminine.

Meillet finds here evidence for dating the separation of Hittite at the same period as that of Tocharian and Italo-Celtic; but both these groups make large use of the feminine gender. Surely the facts tend rather to put Hittite and Armenian in a class by themselves; and the extensive changes already undergone by Armenian at the time of our earliest records prevent our maintaining confidently that the feminine gender had always been lacking there.

⁷ Probably the Hittite suffix *tar* is connected with the IE instrumental suffix *dhro*; cf. especially the Av. infin. *haraðrai* 'to guard'.

⁸ op. cit. = BSL 32. 1-28.

(6) Petersen⁹ has shown that the personal pronouns had in IE an extraordinary paucity of case distinctions. He remarks (186): 'In their comparatively small number of forms and the vagueness of their case usage these paradigms remind one . . . of Hittite'. Later in the same paragraph (188) he says: 'It is an instance in which Hittite, barring recasting of forms by analogy, has been more conservative than any IE language'. He does not, to be sure, consider Hittite more conservative than primitive IE itself; but that is because on the basis of the Hittite evidence he assigns to primitive IE a more archaic system of personal pronouns than any other scholar has done.

(7) In treating the plural declension of nouns Petersen¹⁰ starts with Hittite and makes it probable that the slight tendencies toward case distinctions in the plural in that language are innovations; Hittite seems to have possessed, at a time not very remote from the date of our records, a single plural form for each type of stem but no plural cases at all. Petersen considers it highly improbable that Hittite would have given up a previously existing plural case-system while retaining the parallel system in the singular, and so he concludes that the lack of cases in the plural is original, and that the IE plural cases were developed after the separation of Hittite. This conclusion is amply justified by the satisfactory explanation of the IE plural declension that it makes possible. Petersen remarks (259₁₇): 'The Hittite declension thus is an important witness for the correctness of Forrer's and Sturtevant's position . . . that Hittite was only a remoter relative to the other IE languages, and had gone its own way long before the end of the Indo-European period.'

I can now point out several additional Hittite archaisms, some of which are as striking and cogent as any of those previously discussed, with the sole exception of the first, the retention of *IH h*.

(8) It is well known that when a dental stop came to stand next another dental stop in pre-IE a sibilant was developed between them; but no IE language preserves this group intact. A majority of them show *st*, while Italo-Celtic and Germanic have in most words *ss*. Skt. has *tt*, which has long been recognized as an analogical restoration, and Kent¹¹ has just made it probable that *st* was everywhere the regular

⁹ LANG. 6. 164-93.

¹⁰ AJP 51. 251-72.

¹¹ LANG. 8. 18-26. Kent neglects to point out that his doctrine enables us at last to connect Goth. *waist* directly with Gk. *οἶσθα* 'you know', both from IE **woitstha*.

development and that the western *ss* resulted from analogical restoration of a final dental of a root particularly in the *to*-participles. However that may be, all are agreed that such groups as *tst* and *dzd* once existed, although no historical IE language has preserved them.

Hittite preserves *tst* for original dental plus dental in several words, although their exceptionally crabbed orthography long prevented an understanding of their phonetic character. Götze¹² has shown that we must read *tsts* and *tst* in a number of verb forms from roots ending in a dental plus personal endings beginning with a dental. Beside *etmi* (*e-it-mi*) 'I eat', *atweni* (*a-tu-e-ni*) 'we eat', *atanzi* (*a-da-an-zi*, *a-ta-a-an-zi*) 'they eat', *eter* (*e-te-ir*) 'they ate', *et* (*e-it*) 'eat', etc. we have *ezzi* [*etstsi*] (*e-iz-za-az-zi*, *e-iz-za-zi*, *e-za-az-zi*) 'he eats', *azleni* (*az-za-as-te-ni*) 'you eat', *ezla* (*e-iz-la*) 'he ate'.

It may be argued that dissimilation of *tst* to *st* is peculiarly easy and that it may have happened independently in each branch of IE; but at any rate we have another Hittite archaism which is not shared with any other known language.

(9) The only IE language that frequently distinguishes between labio-velars and velars in the position before a consonant is Gk.; in all other known IE languages we ordinarily meet loss of the labialization. I agree with Reichelt¹³ in thinking that labio-velars before consonants originally changed the labialization to syllabic *u* (e.g. Gk. *γυρή*, Lat. *si-cubi*, Skt. *kutra*) and that the more common developments are based upon analogical restorations. But whatever opinion of this matter one may hold, it is scarcely possible to avoid the belief that labio-velars once existed before consonants as well as before vowels.

In Hittite the regular correspondent of an IE labio-velar is *kw* before a vowel and *ku* before a consonant; e.g. *akwanzi* (*a-ku-wa-an-zi*, *a-ku-an-zi*) 'they drink'; *ekuzzi* (*e-ku-uz-zi*, *e-ku-zi*) 'he drinks': Lat. *aqua*; *nekumanz* (*ne-ku-ma-an-za*, *ni-ku-ma-an-za*) 'naked': IE **nogwedhos*; *hwenzi* (*ku-en-zi*) 'he strikes', *kunanzi* (*ku-na-an-zi*) 'they strike': Skt. *hanti*, *ghnanti*.

(10) I have shown¹⁴ that the abl. sing. of all IE nouns must be traced to *ts*, zero grade of the suffix *tos* of Lat. *funditus* 'from the bottom', etc. The ending *t* of the *o*-stems and the ending *s* of all other stems represent two different sandhi-forms, as we must conclude from the different distribution of the same two resultants of final *ts* in the nom. sing. of the

¹² Madd. 126 and fnn. 1-5.

¹³ IF 40. 57-61; Sturtevant LANG. 6. 223.

¹⁴ LANG. 8. 1-10. Cf. Gray, LANG. 8. 191 f.

dental stems (*t* in Skt. and *s* elsewhere; although both Skt. and the other languages record both *t* and *s* in the ablative). Hittite also shows two original sandhi-forms of ablative *ts*; *ts* (written *z*) is retained in the ablative while *t* appears in the semantically similar instrumental. These facts are easily explained if we assume that in pre-IH final *ts* lost *s* under certain conditions (perhaps before initial *s* of the next word) and that the two resultant forms were specialized in Hittite as ablative and instrumental, while they were retained as sandhi forms in IE until ablative *s* < *ts* coalesced with the genitive *s* in all stems that had such a genitive. Even those who may reject the Indo-Hittite hypothesis must at least admit that ablative *s* and *t* beside *tos* imply an earlier ablative in *ts*, and also that this logically necessary ablative is preserved in Hittite alone.

(11) All scholars are agreed that root-class verbs such as IE *esmi* 'I am' and *edmi* 'I eat' represent an archaic conjugation type which tends to die out in all historic languages. Sanskrit preserves more of them than any other IE language, and even here the 130 root-class verbs of the Vedic texts are reduced by about 50% in the later language. Everywhere thematic verbs with full grade of the root are the ones that tend most of all to supplant the root-presents, and it is significant that even in the Veda these 'unaccented *a*-class' verbs form the most frequent type. And yet current theories of ablaut require us to believe that words with full-grade vowel in successive syllables cannot be original. It is certain, then, that many thematic verbs with full grade of the root are supplanters, and there is good reason to believe that the type itself is of secondary origin. There is great inherent probability that it is due to a contamination of root-class presents and thematic presents with reduced or zero grade of the radical syllable. That is, the type **déiketi* (Lat. *dicit*) is probably nothing but a fusion of types **déikti* (cf. Skt. *dideṣṭi*) and **dikéti* (Skt. *diśati*).

Hittite, unlike any IE language presents far more root-class verbs than primary thematic verbs of both ablaut types. Owing to the simplification of the Hittite vowel system it is not always possible to distinguish between the two classes of primary thematic verbs, but it is clear that both classes must be recognized. The third pl. of *tai* 'places' is *tiyanzi*, which must come from IH *dh̥ty-enti* or *dh̥tyonti*, no other possible start form could yield it, and so the (rare) third sing. *tiyezi* must come from IH *dh̥tyeti*.¹⁵ Hittite *wasezi* 'he puts on, clothes'

¹⁵ I assume that the root of this verb was *dhēi*. There are several Hittite forms with original long diphthong and Skt. presents the aorist forms *adhītam*, *dheyam*, *dheyur*, *adhīmahi*, *dhīmahi*, *adhāyi*, *dhāyi*.

(beside root-class *westen* 'clothe ye, put on') must represent IH *wšseti*. Hittite *lukezi* 'kindles' (beside *lukzi* 'kindles' < IH *leukti*) may come either from IH *luketi* or *leuketi*. Clear cases of the latter type are *neyanzi* 'they lead, turn' < IH *neyonti* (Skt. *nayanti*), pret. *net* < IH *neyet* (Skt. *anayat*), and two or three other verbs with root ending in IH *ei*.

Hittite does not take us back to the time before thematic verbs with strong roots existed, but it does show us a stage of linguistic development when they were relatively rare.

(12) Hittite has the three classes of nasal presents that are familiar in IE, those with nasal infix, with suffix *nu*, and with suffix *nā*. None of them show thematic forms in the active voice, and that may at once be set down as an archaism; but far more remarkable and important are their distribution between the two conjugations and their difference in meaning. As is well known, all three nasal classes in IE belong to the present system and they are indistinguishable in meaning. In Hittite, however, the nasal infix presents and the presents with suffix *nu* belong to the *mi*-conjugation, which corresponds to the IE present system, and they generally have causative force, while the *na*-presents belong to the *hi*-conjugation, which corresponds to the IE perfect system, and have intensive force.¹⁶ That the causative force of the first two classes existed in IH is shown by several survivals in IE. In Lithuanian the suffix *inu* regularly has causative value, as *augīnu* 'I cause to grow' beside *áugu* 'I grow'.¹⁷ Kurylowicz¹⁸ points out five nasal presents in the Rig Veda that are used transitively while the corresponding intransitive force is expressed by middles without nasal formative; namely *punā*- 'cleanse': *pava-*, *junā*- 'urge': *java-*, *ramnā*- 'please': *rama-*, *śumbha-* 'beautify': *śobh-*, *tuñja-* 'thrust': *tuja-*. Three of these verbs, to be sure, belong to the *nā*-class, which in Hittite does not have causative value; but that is a result of the thorough confusion of the *nu*-class and the *nā*-class in IE and particularly in Indo-Iranian. Precisely the *nu*-suffix shows causative force in Skt. *inoti* 'sets in motion' beside *eti* 'goes', *dhinoti* 'nourishes' beside *dhayati* 'sucks', Gk. *ῥοιμυ* 'incite' and Av. *arənav-* 'cause to go to, grant', both from the IE root *er* 'move'.

¹⁶ For the first two classes of verbs, see Delaporte, Gramm. 49, 51; Sommer, Abhiyava-Urkunden 229 and references; for the verbs in *na*, see Sommer, BoSt. 10. 22; Götze, Madduwattas 129 f.; Sturtevant, Lang. 7. 167-71.

¹⁷ Wiedemann, Handbuch der Litauischen Sprache 123; Brugmann, Grundriss 2^a. 3. 74.

¹⁸ Rocznik Orientalistyczny 6. 201-4.

The IH change of *uw* and *əw* to *um* gave the *nu-* and *nā-* verbs identical form in the first person pl. (IE *-numes*), and this led in IE to a thorough confusion of the two types both in form and in meaning.

(13) Lat. *nox*, Skt. *naktis*, Gk. *νύξ* 'night', Skt. *naktam* 'by night', and the related nouns contain various suffixes appended to a root **nekw-* or **negw-*, but no IE language shows verb-forms from such a root. In Hittite we have phrases *nekuz mehur* 'evening' and *nekuz MUL* 'evening star', and once (KUB 1.13.4.27) we have *nekuz* alone as a nominative. There can be no doubt of its connection with the IE consonant stem **nokt-* 'night', although it contains full grade of the root. Hittite also gives us the related verb which all the IE languages have lost; *nekuzi* means 'he undresses, goes to bed', and *nekutat* is an impersonal pret. mid., 'people went to bed, it was bed-time'. Hittite *nekuz*, then, does not mean 'night' but 'undressing, going to bed' and *nekuz mehur* is properly 'the time of going to bed, bed-time'.¹⁹ Few will deny that this group of phrases gives the impression of being more archaic than the isolated IE word for 'night'.

(14) Skt. *āste* = Gk. *ἵσται* 'sits' are completely isolated in IE except for compounds and derivatives in Skt. and Gk. and a few Avestan forms. Hence Hirt²⁰ tried to get rid of the root by deriving the third sing. from **ē-sd-tai* (: **sed-* 'sit'). This hypothesis will not apply to the Hittite forms *esa*, *esari* 'he sits'; and in Hittite the middle forms do not stand alone. We have an active *eszi* (*e-es-zi*) 'he sets', and also a number of derivatives such as *esa-* (*e-es-sa-i*) 'he sets, prepares', *ases-* (*a-sa-a-si*, *a-se-sa-an-zi*) 'beset, set, found', *asesanu-* 'cause to dwell, cause to be inhabited', *asesar* (*a-se-es-sar*) 'assembly, population'. Here again Hittite seems more primitive than IE.

This is by no means the end of the list that I might give. There are many other details in which Hittite is certainly archaic; e.g., it possesses a root-class verb *upzi* 'comes up' (of the sun), from the root of Gk. *ὑπό* 'under' and Skt. *upa* 'hither'; it possesses another root-class verb related to Gk. *ἀνάγκη* 'necessity' although no IE language has one. Then there are several more important matters in which the Hittite situation must be adjudged relatively primitive unless one holds strongly to Petersen's position that the probabilities are always in favor of Hittite innovations. I hope that the material here presented will justify an unprejudiced attitude toward the question; at any rate it is still my opinion that, if Hittite presents at any point a situation that seems in itself to

¹⁹ See JAOS 52. 10 f.

²⁰ IF 37. 227 f.

be more archaic than the situation which has to be assumed for IE, we are justified in ascribing such an archaic condition to IH, even though it may be found possible to derive the Hittite phenomena from those assumed for IE. For example, the Hittite archaisms here presented constitute my grounds for believing that the IH medio-passive was a group of noun forms just beginning to be systematized under the influence of the active verb, rather than believing, as Petersen does, that a well developed medio-passive system was by complicated analogical processes reduced in Hittite to something very like chaos.

HITTITE AND TOCHARIAN

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[After separation from IE Hittite and Tocharian must have constituted for some time a dialectic unity, because they possess in common certain innovations. These are summarized near the close of the article.]

The realization that Hittite and Tocharian, although in territory of the *satəm*-languages, nevertheless themselves belong to the *centum*-group, and that both have a set of medio-passive *r*-endings comparable to those of Italic and Celtic, naturally leads to raising the question as to the meaning of these facts. Is this a coincidence due to the peripheral position¹ of these two languages, which, as Meillet, BSL 32. 1 ff., asserts, brought it about that changes which affected the rest of the IE territory did not reach so far, or do we find here a closer and more intimate connection which sets off Hittite and Tocharian over against the rest of the IE languages? If we attempt to apply the recognized test of the relationship of languages, sc. the existence of innovations made in common, we meet with the difficulty that in both instances it is hard to determine whether Hittite and Tocharian were the innovators or whether they have retained old characteristics lost by the others.

The latter is certainly the correct alternative to explain the existence of the labio-velars² in these two languages as opposed to the loss of the labialization in adjoining territory, for a development of such a peculiar nature in two disconnected territories cannot be made probable. The palatals, however, present a more complex problem. If we assume that these at one time existed throughout the entire IE territory and were

¹ Meillet connects the peripheral position of Italic, Celtic, Hittite, and Tocharian with the probability that they broke away from the parent language before the others. It is obvious that changes in the latter would encounter an unsurmountable barrier after the separation of the former.

² We do not have to decide at this time the question whether the labial element was originally a distinct semi-vowel *y*. See Sturtevant LANG. 6. 224. Whatever it was, Tocharian (see below) reveals evidence of its past existence which places it in this respect also with Hittite and the *centum*-languages.

merged with the velars secondarily in the *centum*-languages, then Hittite and Tocharian on the one hand, and the previously known *centum*-languages on the other, either performed the very same innovation independently of each other, or else, if the innovation was performed in common, we must assume that at one time the *satəm*-languages did not intervene between the eastern and western *centum*-languages, but that there was a pre-historic dislocation which resulted in the position of the languages as we know them. Since both of these alternatives are highly improbable, it seems difficult to avoid the conclusion that Hirt, BB 24. 218 ff., Idg. Gram. 1. 233 ff., is right in concluding that the palatal stops were secondary developments from the velars. We have only to assume that this change did not reach as far as the *centum*-languages of the West or as Hittite and Tocharian in the East. It was of central origin and failed to penetrate a large part of the IE territory in the one direction and a comparatively small part in the other.

Since both Hittite and Tocharian reflect the older state of affairs as regards the IE labio-velars and palatals, the treatment of these sounds tells us nothing about the relation of these two languages to each other. It cannot even decide the chronological question whether at the time when the *satəm*-languages gave up the labial element of the former or when they developed palatals from the older velars, Hittite and Tocharian were still contiguous with the rest of the IE territory, or whether they had separated and gone their own way.

Also from the occurrence of medio-passive *r*-endings in Hittite and Tocharian no conclusions can be drawn concerning the relation of these two languages if Meillet's interpretation is correct. He assumes that these *r*-endings at one time existed in the entire IE territory, but were retained only by the peripheral languages, sc. Hittite and Tocharian in the East, and Italic and Celtic in the West, and were lost by the languages in central territory. There is however a very serious objection to Meillet's hypothesis in the detachability of the *r*-endings in Hittite and Tocharian as opposed to Italic and Celtic. In both of the former *r*-forms exist beside forms without *r*, but otherwise identical; cf. Sturtevant LANG. 7. 246, Petersen AJPh 53. 209. This can only mean that most forms in *r* were made by secondary extension of those without it, but if this took place in Indo-European or pre-Indo-European times it is inconceivable that the original state of affairs was not obscured in languages which suffered such extensive changes of all kinds as Tocharian and Hittite. Whatever we may think of Italic and Celtic, the former

point definitely to the old theory that the system of *r*-endings in the Medio-Passive grew out of a single inherited form.³

Before drawing conclusions as to the relation of Hittite and Tocharian from this it will be well to substantiate the statement that the *r*-endings are detachable in both languages. To begin with Hittite, the 3. sing. *ar-ta-ri* = *ar-ta*, *es-a-ri* = *es-a*, the 3. pl. *es-anta-ri* = *es-anta*. In the 1. sing. cf. *tapar-ha* and *iya-hha-ri*, in the 2. sing. *pahhas-ta* and *iya-tta-ri*, in the 2. pl. *iya-dduma*⁴ and *sarkaliya-tuma-ri*. In Tocharian the same detachability of *r*-endings is in evidence, but instead of retaining the two sets of endings with and without *r* in the same use, a secondary distinction was developed in that the former became the primary endings, and were used, e.g., in the present, while those without *r* were employed as secondary⁵ endings, e.g., in the preterite or imperfect: cf. the 3. sing. pres. *kālpnā-t-ār* with the pret. *kālpā-t*, the 3. pl. pres. *kālpnā-nt-ār* with the pret. *kālpā-nt*. In the 1. pl. cf. the pres. *sika-ṃt-ār*⁶ with the pret. *kālpā-māt*, in the 2. pl. cf. the subjunctive *kālpā-c-ār* with the pret. *kālpā-c*. In the 2. sing. primary *-tār* (evidently from *-te-ār*), e.g., in *kālpnā-tār* pres., corresponds to secondary *-te* in the pret. *kālpā-te*. Only the primary 1. sing. in *-mār*, e.g., pres. *kālpnā-mār*, is analogical: 2. sing. act. *-t*: mid. *-tār* = 1. sing. act. *-m*: mid. *-mār*.

Since this form is thus clearly of later origin, it appears that Tocharian medio-passive *r*-endings also were secondary additions to older forms without *r*, just as they were in Hittite. Now, as was stated above, it is highly improbable that this innovation could have taken place in IE times without obscuring the traces of their secondary origin in languages so much changed as Tocharian and Hittite. The latter must therefore have been the innovators, and the only question is whether the innovation was performed separately or in common. Although the geographical position of these two languages at the eastern

³ That a similar innovation should have been performed independently by two languages in the extreme West and two others in the far East is in this instance not improbable because the roots of the innovation were present in the entire IE territory. After a third singular like Hit. *es-ari* was once used as an indicative beside its original volitive use, spread of the *r*-form to other indicative forms was easily accomplished.

⁴ In the comparison of Hittite forms it must be remembered that double consonants have no double etymological value, and that the signs for voiced and voiceless stops designate the same sound, apparently the voiceless.

⁵ I use the terms primary and secondary for convenience, although not accurate historically, for the IE perfect contributed its share to the latter in Hittite and Tocharian.

⁶ With the dropping of the unstable vowel *ā* in *-māt* of *sika-ṃt-ār* cf. e.g. the numeral *okāt* 'eight' beside *okta-*, *ṣpāt* 'seven' beside *ṣapta-*.

periphery would favor the latter alternative, this is not a decisive consideration, and we must look for a definite answer to the question of the relation of these two languages to a more extended comparison of their grammatical structure, in order to determine whether they also show other common innovations, particularly ones which because of their peculiar nature could scarcely have originated independently. For this purpose the recent appearance of the Tocharian grammar of Schulze-Sieg-Siegling⁷ for the first time makes easily available the evidence of the Tocharian, even though the interpretation of this evidence often causes trouble, and, as the authors indicate in their preface, fixing many of the details of the history of Tocharian sounds and inflections must be deferred until the B dialect also has been worked through thoroughly. Nevertheless a sufficient number of characteristics of Tocharian stand out clearly enough so as not to admit of any doubt, and it is on these that the question of its relation to Hittite must depend for the present.

The most far-reaching and at the same time unambiguous innovation which is common to Hittite and Tocharian is the loss of the aspiration and of the voiced element of their explosives, so that these are all designated with the sign of the voiceless stop in Tocharian, and indifferently in Hittite with the sign of the voiced or voiceless stop. Thus all the labials appear as Toch. *p*, Hitt. *p* or *b*, all the dentals become Toch. *t*, Hitt. *t* or *d*, all velars and palatals Toch. *k*, Hitt. *k* or *g*.⁸

Beginning with the IE labials, we find *p* frequent in all positions. Thus Hitt. *pett-enu-* 'cause to fly' and *pettar* 'wing' : Skt. *pátati* 'flies', *pátra-m* 'feather, wing', Gr. *πέτομαι* 'fly', *πτερόν* 'wing';⁹ Hitt. *pedan* 'place' = Skt. *padá-m* 'place', Gr. *πέδον* 'ground';¹⁰ Hitt. *pahhur* 'fire', Toch. *por* 'fire' : Gr. *πῦρ*, OHG *fuir* 'fire';¹¹ Toch. *pācar* 'father' : Gr. *πατήρ*, Lat. *pater*;¹² Toch. *prak-sa-m* 'I pray' : Skt. *prcchāti* 'asks', Lat. *precor* 'I pray';¹³ Hitt. *sippant-a-hhi* 'I pour a libation': Gr. *σπένδω*

⁷ Quoted henceforth with the abbreviation SSS.

⁸ This formulation necessarily abstracts from later secondary changes which took place in each language separately; e.g., the change of Hitt. **-ti* to *-zi* as in *es-zi* = Gr. *ἔσσι*, IE **es-ti*, or the Tocharian palatilization of *t* as in *mācar* : Lat. *māter*, IE **mātēr*.

⁹ So Hrozný, Spr. d. Heth. 70 f.

¹⁰ Sturtevant, JAOS 52.5.

¹¹ Friedrich, ZDMG 76. 159.

¹² SSS 6.

¹³ Not only the root, but also the suffix of *praksam* corresponds to Skt. *prcchā-ti*, for IE *-sko-*, Skt. *-(c)cha-* became Toch. *-sa-*, which is *-ska-* in the B dialect; see SSS 358 f.

'pour a libation', Lat. *spondeo* 'give a pledge';¹⁴ Hitt. *siptamis* 'seventh' : Lat. *septimus*, Toch. *ṣpāt* (*ṣāpta-*) 'seven' = Skt. *saptá*, Gr. *ἐπτά*, Lat. *septem*; Hitt. *tepnu-* 'make small, few' : Gr. *ταπεινός* 'low, humble'; Hitt. *istap-* 'cause to stand' = Skt. *sthāpāyati*;¹⁵ Toch. *ṣāpñi* 'sleepy' and *ṣpām*¹⁶ 'sleep' : Skt. *svāpna-h* 'dream, sleep', Gr. *ὑπνος* 'sleep'.¹⁷ Of IE *b* and *ph*, rare as they are, I have seen no examples. On the other hand IE *bh* conforms to expectations in a number of clear and convincing Hittite examples,¹⁸ while its representation by the anticipated Toch. *p* is even beyond the possibility of doubt. With initial *bh-* observe, e.g., Hitt. *parkus* 'high' : Skt. *brhánt-* 'high' (IE root **bherǵh-*);¹⁹ Hitt. *pankus* 'all, whole' = Skt. *bahú-h* 'much, many', Gr. *παχύς*, IE **bhṛǵhu-s*;²⁰ Hitt. *passilas* 'gravel' : Skt. *bhásma* 'ashes' (root **bhes-*);²¹ Toch. *pār-tār* = Lat. *fertur* 'is carried', from the root *pār-*, IE **bher-*, cf. Skt. *bhár-ati*, Gr. *φέρω*;²² Toch. *pracar* 'brother' : Skt. *bhrā'tā*, Lat. *frāter*;²³ Toch. *poke* 'arm' from IE **bhāǵhu-* as in Skt. *bāhú-h*, Gr. *πῆχυς*.²⁴ Medial *bh* in Hitt. *nepis* 'sky' : Skt. *nābhaḥ* 'fog, sky', Gr. *νέφος*;²⁵

¹⁴ Hrozný, op. cit. 4.

¹⁵ Sturtevant LANG. 4. 3 f.

¹⁶ Toch. *m* is pronounced *n*, and often is *n* etymologically.

¹⁷ SSS 5.

¹⁸ Sturtevant, LANG. 3. 109 ff., seemed at the time to have made out a good case for his earlier theory that initial IE *bh-* became Hitt. *h-*, but later (JAOS 50. 125 ff.) retracted in view of a number of convincing etymologies in which it appears as Hitt. *p-*, which identification has the greater compelling power because this development is exactly what would be expected since it is in line with that of medial *bh* and of every other series of explosives. Unless therefore, as is highly improbable, influence upon Hittite of some other remoter IE dialect, in which IE *bh-* became *h-*, could be established, it is necessary to reject such comparisons as *handami* 'I set in order, prepare' = Skt. *bandhāmi* 'I fasten together, construct', *hanna-* 'litigate, decide a suit' : Skt. *bhāna-ti* 'speaks, tells', and others not mentioned by Sturtevant, as *haddulatar* 'health' : Skt. *bhadrá-h* 'fortunate', Goth. *batiza* 'better'. We must even reject the comparison of the root-syllable of *humant-* 'all' with Toch. *pu-k* 'all' and Skt. *bhū'-ri-h* 'much'.

¹⁹ Sturtevant, LANG. 6. 216.

²⁰ Sturtevant, loc. cit.

²¹ Sturtevant, JAOS 51. 126.

²² Fraenkel, IF 50. 227.

²³ E. g. P. Poucha, Arch. Orient. 2. 322.

²⁴ Boisacq, Dict. etymol. s.v. *πῆχυς*; Fraenkel IF 50. 7. The *o* of *poke* is not yet explained, for Toch. *o* normally represents an IE *u*-diphthong. However, with IE *ō* cf. Toch. *ñom* 'name' : Lat. *nōmen* Skt. *nā'ma*, and, with original short *o*, *orkām* 'darkness' : Gr. *ὀρνός* 'dark', IE root **orgʷ(h)-*, cf. Hirt IF 12. 226; Scheftelowitz BB 28. 293, 29. 17.

²⁵ Friedrich, loc. cit.

Hitt. *karap-anzi* 'they devour, eat' : Skt. *grbh-ñā'-ti* 'seizes', Engl. *grab*;²⁶ Toch. *špāl* 'head' : Gr. *κεφαλή* 'head';²⁷ Toch. *klop* 'pain' probably : OHG *klioban* 'cleave', Gr. *γλύφω* 'carve', root **gleubh-*, **glubh-*.

Turning to the dentals, IE *t* occurs, e.g., in Hitt. *tres*, Toch. *tre* 'three' = Skt. *trāyāḥ*, Lat. *trēs*, IE **trejēs*;²⁸ Hitt. *tarmaizzi* 'delimits, fixes' : Gr. *τέρμα* 'end', *τέρμων* 'boundary', Lat. *termen*, *terminus* 'boundary, limit';²⁹ Hitt. *dar-anzi* 'they declare' : Lith. *tariù taĩti* 'say'; Toch. *tām* obl. 'her' = Skt. *tā'm*, Gr. *τήν*;³⁰ Toch. *trāmā-š* 'he trembles' : Gr. *τρέμω*, Lat. *tremo* 'I tremble', Hitt. *hu-wantis* 'wind, storm' and Toch. *want wānt* 'wind' : Lat. *ventus*, Engl. *wind*;³¹ Hitt. *ar-ta* 'arises' : Gr. *ᾠρ-το* 'arose', Skt. *ār-ta* 'arose';³² Toch. *okāt* (*okta-*) 'eight' : Skt. *aṣṭau*, Gr. *ὀκτώ*, IE **oktōu* 'eight'. For IE *d* Hittite affords a sufficiency of examples, e.g., *tekk-usa-mi* 'I show, prove' : Gr. *δείκ-νυ-μι* 'I show', Skt. *diṣ-ā-ti* 'points out';³³ Hitt. *tark-umm-anzi* 'they explain, interpret' : Skt. *da-dārṣ-a* 'saw', Gr. *δέρκομαι* 'I see'; Hitt. *ta-* in *ta-yugas* 'two years old' like Gr. *δω-* in *δω-δεκα* 'twelve' : Skt. *dvā* 'two';³⁴ Hitt. *kardias* gen. 'heart' = Gr. *καρδίας*;³⁵ Hitt. *et-er* 'they ate' : Gr. *ἔδω*, Lat. *edo* 'eat';³⁶ Hitt. *andan*³⁷ 'within, into' : Gr. *ἐνδον* 'within'. In Tocharian, however, IE *d* is scarce.³⁸ But compare *wat-ku* 'a command' with Skt. *vádati* 'says, tells', Lith. *vadinti* 'call, name'; and Toch. *länt-ä-š* 'he goes out' with Lith. *lëndù lĩ.sti* 'creep', although it is possible that the latter had IE *dh* instead of *d*. IE *dh* both languages again used frequently, e.g., Hitt. *da-s* 'he placed', Toch. *tā-sa-mās* 'we place' : Skt. *á-dhā-t* 'he placed', Gr. *ἔθε-μεν* 'we placed';³⁹ Hitt. *tar-na-si* 'thou

²⁶ Sturtevant, LANG. 8. 130.

²⁷ Fraenkel, IF 50. 7.

²⁸ See Sturtevant, Hitt. Glossary 70.

²⁹ Sturtevant, LANG. 5. 10 f.

³⁰ Cf. SSS 169.

³¹ Mudge, LANG. 7. 253.

³² Sturtevant, LANG. 3. 166 f.

³³ Sturtevant, LANG. 6. 27 f.

³⁴ Change of IE *dy-* to Hitt *d/t* is doubted by Sturtevant AJPh. 48. 249, who suggests Hitt. *ta-* from IE **do-*.

³⁵ So, e.g., Sturtevant, LANG. 6. 214.

³⁶ Hrozný, op. cit. 61.

³⁷ Probably Hitt. *a* for *e* in the first syllable is due to Hittite vowel assimilation rather than inherited ablaut differences.

³⁸ With palatalization of initial *t-* to *š* before *ā* in the numeral *šāk* 'ten' = Skt. *dāśa*, Lat. *decem*, IE **dek̑m*; so, e.g., Poucha 325. It is not clear, however, why the result of the palatalization of *t* is here *š* instead of the regular *c*; cf. SSS 350.

³⁹ Friedrich, loc. cit.

putst down' : Skt. *dhār-āya-ti* 'he holds up'; Toch. *ckācar* 'daughter' (with *c* from *t*, SSS 350) : Skt. *duhitā*, Gr. *θυγάτηρ* 'daughter',⁴⁰ IE **dhuǵh(ə)ter-*; Toch. *rtār* 'red' = Skt. *rudhirá-h* 'red', Gr. *έρυθρός*.⁴¹ Of IE *th* there is a certain example in the personal ending of the 2. sing. perf. *-tha* Hitt. *-ta*,⁴² Toch. *-t*, e.g., Hitt. *as-ta*, Gr. *ἦσ-θα*, Skt. *ā's-i-tha* from the verb 'to be', or Toch. *knā-na-t*⁴³ 'thou knowest', with present function.

Of the IE velars, *k* occurs, e.g., in Hitt. *lukk-esta* 'grew light', Toch. *luk-s-eñc* 'they light up', : Skt. *rō'catē* 'grows light', *ruk-ṣā-h* 'gleaming', Lat. *lux*,⁴⁴ Hitt. *kalmas* 'fuel' : Lith. *kėlmas* 'tree-stump'; *kar-s-un* 'I cut off' (pret.) : Skt. *kārtati* 'cuts', Lith. *kertù* 'strike';⁴⁵ Toch. *kālp-nā-tār* 'attains to, finds' : Skt. *kālp-a-tē* 'is ordered, befalls';⁴⁶ Toch. *kukāl* 'wagon' : Skt. *cakrā-h* *cakrā-m* 'wagon', Gr. *κύκλος* 'wheel';⁴⁷ Hitt. *tu(w)ekkas* 'body' : Skt. *tvā'k* 'skin'; Toch. *wak* 'voice' : Skt. *vā'k*, Lat. *vōx* 'voice';⁴⁸ Toch. *ak* 'eye' : Lith. *akis* 'eye'.⁴⁹ The voiced stop *g* is found e.g. in Hitt. *lenkais* or *lingais* 'oath' : Lat. *ligāre* 'tie bind' (cf. *religio*),⁵⁰ Lith. *laigōnas* (?) 'brother-in-law'; Hitt. *yugan* 'yoke' = Skt. *yugā-m*, Lat. *jugum* 'yoke';⁵¹ Toch. *sārk* 'illness' : Lith. *sergù* *sīrgti* 'be ill';⁵² Toch. *oko* 'fruit' : Lat. *augeo* 'grow', Lith. *augu*, *dukti* 'grow'.⁵³ Examples of IE *gh* are scarce, but the following are certain: Hitt. *lag-ari* 'falls, lies' and Toch. *lake* 'lair' : Gr. *λέχος* 'bed, couch', Goth. *ligan* 'lie', OBlg. *lēga*, *lešti* 'lie down';⁵⁴ *dalugas* 'long' : Skt. *dīrghā-h*, Gr. *δολιχός* 'long'.⁵⁵ Probably also Hitt. *tuqq-ari* 'falls to one's lot' : Gr. *ἐτυχον* 'received by lot',⁵⁶ although the original sound may also have been a palatal.

⁴⁰ So, e.g., Poucha 325 f.

⁴¹ SSS 15.

⁴² Friedrich 167.

⁴³ The root *knā-* is of course the IE **ǵnō-* of Skt. *jñā-*, Gr. *γνώ-*; cf. Poucha 324.

⁴⁴ So, e.g., Zimmern, OLZ 25. 200 f.

⁴⁵ Cf., e.g., Sturtevant, LANG. 6. 225.

⁴⁶ Otherwise Poucha 322 f.

⁴⁷ SSS 7.

⁴⁸ Cf. SSS 2.

⁴⁹ SSS loc. cit.

⁵⁰ Otherwise (: Gr. *ἐλέγχω*) Sturtevant, LANG. 6. 218.

⁵¹ Götze, IF 42. 327 f., who, however, needlessly assumes borrowing from the Skt. *yugā-m*, cf. Sturtevant, LANG. 6. 218.

⁵² Poucha 323.

⁵³ Poucha, loc. cit.

⁵⁴ Hrozný, op. cit. 23.

⁵⁵ Sturtevant, LANG. 6. 218.

⁵⁶ Mudge, loc. cit.

Palatals are particularly frequent in both languages. IE *k̂*, e.g., in Hitt. *kitt-a* or *kitt-ari* 'lies': Skt. *çē'tē*, Gr. *κείται* 'lies';⁵⁷ Hitt. *kariya-zzi* 'covers': Skt. *çaraṇá-m* 'protection';⁵⁸ Toch. *kānt* 'hundred': Skt. *çatám*, Lat. *centum*; Toch. *klots* 'ear': Skt. *çru-tá-h* 'heard', Gr. *κλυτός* 'famous'; Hitt. *wekzi* 'demands', *uwaki-zzi* 'wishes, prays': Skt. *vá-çanti* 'they desire, love', Gr. *ἐκών* 'willing';⁵⁹ Hitt. *tekkusa-mi* 'I show, prove': Skt. *diçáti* and Gr. *δείκνυμι* 'show';⁶⁰ Hitt. *nakkis* 'heavy': Lith. *nasztà* 'load'; Toch. *pikiñc* 'they write, paint': Skt. *piñçáti* 'decorates', Gr. *ποικίλος* 'variegated'; Toch. *šák* 'ten': Skt. *dáça*, Gr. *δέκα* 'ten'.⁶¹ IE *ǵ* occurs, e.g., in Hitt. *genu* = Lat. *genu* 'knee'⁶² and, Toch. *kanw-em* dual 'knees' with the root grade of Gr. *γόνυ* (cf. Skt. *jā'nu*, Pers. *zānū* 'knee');⁶³ Hitt. *kis-ta-ri* 'is quenched' and Toch. *kās-be* 'extinguished': Skt. *jásatē* 'is exhausted', Av. *zah-*;⁶⁴ Toch. *kam* 'tooth': Skt. *jāmbha-h*, Gr. *γόμφος*, OBlg. *zqbz* 'tooth';⁶⁵ Toch. *knā-na-t* 'thou knowest': Gr. *ἐ-γνώ-ν* 'I knew', OBlg. *zna-ti* 'know';⁶⁶ Hitt. *harkis* 'white' and Toch. *ārki* 'white': Skt. *árjuna-h* 'white', Gr. *ἄργυρος* 'shining';⁶⁷ Hitt. *mekkis* 'great', Toch. *māk* 'much' probably: Gr. *μέγας* 'large', Skt. *majmán-* 'size';⁶⁸ Toch. *ākeñc* 'they lead' and possibly Hitt. *ek-ir* 'they died' (see Sturtevant LANG. 3. 164 f.): Gr. *ἄγω*, Lat. *ago* 'I lead', Skt. *ájati* 'drives', Av. *azaiti*; Toch. *malke* 'milk': Gr. *ἀμέλω*, Lith. *mélžu* 'I milk'. Examples of *ǵh* are much more scarce. The following three are the only certain ones I have seen, but they are

⁵⁷ Hrozný, op. cit. 164.

⁵⁸ This connection seems to me so obvious that I do not hesitate to draw the conclusion that various words with radical *l*, e.g., Lat. *celāre* 'hide', Gr. *καλιά* 'hut', which are cited by Uhlenbeck, Et. Wörterb. d. ai. Spr. 304, as cognate with Skt. *çaraṇá-*, must be separated from the latter in favor of the above derivation.

⁵⁹ Friedrich, IF 41. 369 f.

⁶⁰ See note 33.

⁶¹ See note 38.

⁶² Friedrich, IF 41. 372 ff.

⁶³ Poucha 324.

⁶⁴ Otherwise Sturtevant, LANG. 6. 226, who connects with Goth. *qistjan* 'destroy' and assumes a labio-velar; but the loss of the labialization in the Hitt. word as well as the Lith. *gestù gèsti* 'be quenched', which he also compares, is insufficiently motivated. In view of the latter, however, it is possible that the Hitt. and Toch. words had a velar instead of palatal.

⁶⁵ SSS 53.

⁶⁶ See note 43.

⁶⁷ Kurylowicz, Symbolae Grammaticae in honorem Joannis Rozwadowski 101; Poucha 324.

⁶⁸ So Friedrich ZDMG 76. 159, Fraenkel IF 50. 11. Although less probable, IE *ǵh* is also possible. See Sturtevant LANG. 6. 216, and cf. Skt. *māhi* 'great'.

enough to show that it conforms to expectations: Hitt. *gimmanza* 'winter' : Skt. *hēmantá-h* 'winter', OBlg. *zima*, Gr. *χείμα*;⁶⁹ Hitt. *pankus* 'all, whole' : Skt. *bāhú-h* 'strong, much', Gr. *παχύς* 'thick', IE **bh₂gh-u-s*;⁷⁰ Toch. *poke* 'arm' : Skt. *bāhú-h* Av. *bāzu-š* 'arm', Gr. *πῆχυς* 'forearm'.⁷¹

That the same law holds good for the labio-velars in Hittite, appears from the fact that those correspondences between Hittite and other languages which are unambiguous and irrefutable are also those which conform to the principle. For IE *kʷ* the best example is the pronoun *kuis*, neut. *kuid* 'who, which' = Lat. *quis quid*, Gr. *τίς τί* or *τις τι*, but Sturtevant, LANG. 6. 219, gives two or three more that are probable, sc. *sakuwa* 'eyes' : IE **sekʷ-* 'follow, see' = Lat. *sequor* 'follow' Goth. *saihan* 'see', and *eku-zi* 'he drinks', which may be cognate with Lat. *aqua* 'water'.⁷² Of *gʷ* we have a certain example in *nekumanza* 'naked' : Goth. *naqaps*, Lat. *nūdus* from IE **nogʷedho-s*⁷³ and of *gʷh* the universally accepted *kuen-zi* 'he strikes, kills' : Skt. *hán-ti* 'he strikes, kills' and Gr. *θέρνω* 'I strike'.⁷⁴ On the other hand examples cited by Sturtevant (220 ff.) to show that the two latter had a different normal development all have no compelling power. Thus Hitt. *war-* 'burn', cited to show that *gʷh* became Hitt. *w*, is not necessarily to be taken with Skt. *gharmá-h* 'heat', and Gr. *θερμός* 'warm', but goes at least as well with Lith. *vėrdu viriaũ vėrti* 'cook'. On the other hand identification of Hitt. *wemiya-*⁷⁵ 'come upon, find' with Lat. *venio* and Gr. *βαίνω* (IE **gʷem-*), as of Hitt. *wa- we-* 'go, come' with Gr. *ἐ-βη-ν* Skt. *á-gā-t* (IE **gʷā-*), can be upheld only if we assume contamination of these roots with the synonymous **uadh-* found in Lat. *vādō* 'go' and in Engl. *wade*. We have every reason therefore for believing that the labio-velars in Hittite were treated as the other explosives—they were all reduced to one and the same sound spelled either as voiced or voiceless.

In Tocharian the reduction of the three sounds to one is still clearer, but the labial element is either lost, or else the following vowel with the preceding labialization appears as *u*, a treatment sometimes alternating

⁶⁹ Sturtevant, LANG. 6. 216.

⁷⁰ See note 20.

⁷¹ See note 24.

⁷² So already Hrozný, op. cit. 62.

⁷³ Sturtevant, LANG. 6. 221 f.

⁷⁴ Friedrich, loc. cit.

⁷⁵ Friedrich, loc. cit., also found IE *gʷ* in Hitt. *huis-* 'live', with which he compared Lat. *vīvus*, Gr. *βίος*, etc. It is obvious that this etymology cannot stand, in view of the Hitt. representation of the labio-velars in the certain instances.

with the preceding in one and the same word. Thus the IE root **pek-* 'cook', with *k*⁷⁶, found in Lat. *coquo*, Skt. *pācati*, occurs in Toch. as *pāk-* and *puk-*; and IE *g^hem-*, with the voiced stop, either as *kām-* or *kum-*.⁷⁶ For IE *gh^s* on the other hand I can quote only one word with obscure vocalism, sc. *orkām*⁷⁷ 'darkness', which I connect with Gr. *ὀρφνός* 'dark', assuming that the latter, like its rhyme-word *μόρφνος* (: Oblg. *merknaṭi* 'become dark'), had a labio-velar instead of a labial as in Boisacq. With the *u*-vowel only is found the interrogative-relative pronoun *kus*, neut. *kuc*,⁷⁸ which corresponds to Hitt. *kuis*, *kuit* and Lat. *quis*, *quid*. It is to be observed that the neuter *kuc* is a guarantee that the *u* is not due to inherited vowel gradation but comes from a Tocharian sound change, for the palatalization of *t* to *c* pre-supposes the palatal vowel *i* of **kuit* in Tocharian times. We have the right therefore to conclude that whether or not the loss of the labial element in the one set of forms was partially or wholly a pre-Tocharian affair, the change of the labialization plus the following palatal vowel to *u* in the other set took place in Tocharian itself, so that it appears as a real *centum*-language in the treatment of its labio-velars as well as palatals, and is herein also like Hittite.

Before drawing conclusions concerning the pre-historic relation between Hittite and Tocharian from the fact that the orders of stop-sounds in both languages have apparently been reduced to one (designated by the sign of the voiceless in the latter, and of either voiced or voiceless in the former), we should satisfy ourselves as to the phonetic interpretation of this phenomenon. For Tocharian of course there can be no question because of the regularity of the result and the unequivocal nature of the signs used. This language changed all other orders to the voiceless,⁷⁹ so that of all the wealth of IE explosives there is left only the trio of *p*, *t*,

⁷⁶ Another instance of IE *g^h* is Toch. *ko* 'cow' = Skt. *gāú-h*, Gr. *βοῦς*, IE **g^hu-s*. Evidently therefore *ko* has a *u*-diphthong and is another instance in which Tocharian shows no trace of the labialization.

⁷⁷ See also note 24.

⁷⁸ With the change to *u* of the labial element of the labio-velar plus the following palatal vowel is to be compared the change of IE **t^he* 'thee' to Toch. *cu*, classified as 'oblique.' Here too the *c* for *t* is evidence of the former existence of a palatal vowel.

⁷⁹ The Tocharian shift of consonants agrees with the Hittite in effacing or tending to efface the difference between the orders, but is altogether different from the Armenian, which, like the Germanic, shifts all orders, so that the distinction is maintained. It is therefore wrong for e.g. Pokorny, *Die Stellung des Tocharischen in Kreise der idg. Sprachen*, or Poucha p. 326 to cite the Tocharian shift as evidence of close relation to the Armenian.

k. Other letters occur only in words borrowed from the Sanskrit or as secondary developments. The former, probably only in spelling, retained to a large extent the Skt. consonants, e.g. in the proper names *Bhādrā*, *Devadattā*, but often even these were made to conform to the Tocharian phonetic system,⁸⁰ e.g., Skt. *bhāgā-h* 'part' became Toch. *pāk*;⁸¹ Skt. *gotrā-m* 'cowstall, family' became *kotār*.⁸² On the other hand the complete merging of the orders is shown also by the fact that later sound changes work alike on all the original orders, e.g. the IE **dhuǵhater-* 'daughter' became Toch. *ckācar*, *t* from both *dh* and *t* suffering the same palatalization to *c*.⁸³

For Hittite, however, the situation is not so simple. The complicating factor is not mainly the alternation of *d* and *t* etc., for it is certain that there is no etymological significance to this, and probably the pronunciation was in every case merely that of the voiceless explosive. If there are preferences for one or the other in certain words, this must be due either to quasi-accidental habits of orthography, or connected somehow with the phonetic or orthographic habits of the language from which the cuneiform system of writing made its way to the Hittite. It is rather the question of the meaning of the frequent double designation of explosives that might cause difficulty. Sturtevant, JAOS 52. 1 ff., suggests that Hittite doubled stops represent IE voiceless stops, whether or not these were aspirated, whereas IE voiced stops and voiced aspirates were never doubled. Although there are numerous exceptions which must be explained away, mainly by analogy, he has produced so much good evidence that the theory merits the most serious consideration. It is obvious that if we accept this law, we must assume that the IE distinction between voiced and voiceless explosives, although given up as far as the presence or absence of the vocal element is concerned, must have persisted in Hittite in some other form. Most probably they were still distinguished as *fortes* and *lenes* at the time from which the Hitt. documents date. Professor Einarsson, LANG. 8. 177 ff., suggests that this distinction was combined with one of duration, inasmuch as voiceless consonants generally are longer than voiced ones, but it seems very improbable that the Hittites could have been conscious of this, for

⁸⁰ For the treatment of Sanskrit loan words in Tocharian cf. SSS 55 ff., P. Poucha Arch. Oriental. 2. 300 ff.

⁸¹ SSS 96.

⁸² Fraenkel, IF 50. 105.

⁸³ Since the vowel of the first syllable was originally *u*, the first *c* for *t* was really due to assimilation to the second, cf. Poucha 325 f. Another instance of *c* from *dh* is *ca-sā-s* pret. of *tā-* 'place' : IE **dhē-*.

except where the difference in length is extreme, as in the Finnish examples quoted, speakers do not realize such a distinction in length of stop sounds. The difference in duration between voiced and voiceless stops had to be established by experimental methods, whereas our feeling is rather the reverse, i.e., although we have no reason to doubt the correctness of Mr. Einarsson's statements, yet if we have any impression about the matter, we will probably say that voiced consonants *feel* longer to us than voiceless, and it is not probable that the Hittite was so conscious of a small difference in actual length as to express it by the doubling of consonants, and that too at a time when the original difference between voiced and voiceless has disappeared. It remains probable that psychologically the difference between original IE voiced and voiceless explosives persisted merely as one between lenes and fortes.

The historical interpretation of the striking resemblance of the treatment of explosives in Hittite and Tocharian as well as of the one important difference can only be as follows: In a remote period when both Hittite and Tocharian had separated from the IE mother tongue, but had not separated from each other, i.e., during a period of Hittite-Tocharian unity, IE voiced stops lost the vocal element and IE aspirates lost their aspiration, but the difference between originally voiceless and voiced may still have persisted in the shape of a difference of strength of utterance, i.e., between fortes and lenes, and this state of affairs continued in Hittite to the time of its documents. In Tocharian, on the other hand, this difference disappeared after its separation from Hittite, so that the last vestige of a differentiation of the orders of explosives was effaced, and only undifferentiated voiceless stops ('tenues') were left.

After recognizing the intimate relationship between the two languages we no longer need be reluctant to assume common changes which are of more limited extent. It now becomes probable after all that the resemblance between Toch. *tkam* and Hitt. *tegan* gen. *taknas* 'earth', with the reverse order of the consonants compared to Gr. $\chi\theta\acute{\omega}\nu$ and Skt. *kṣā'-h*, is due to secondary metathesis performed in the period of Hittite-Tocharian unity, rather than that, as Kretschmer, Glotta 20.66 ff. maintains, they represent the original IE **dheghón-*, and the Greek and Sanskrit were the innovators.⁸⁴ Also striking is the agreement of Hitt.

⁸⁴ The ς of Skt. *kṣā'-h* finds no explanation through Kretschmer's solution. On the other hand when Sturtevant separated Hitt. *tegan* from Gr. $\chi\theta\acute{\omega}\nu$ etc., and connected with Lith. *deñgti* 'cover' (LANG. 6. 226 f.), he lost sight of Toch. *tkam*, which is so clearly the connecting link between *tegan* and $\chi\theta\acute{\omega}\nu$ that we must

pahhur 'fire' and Toch. *por*, the *o* of which represents an original *u*-diphthong, on the one hand against Gr. $\pi\upsilon\rho$, Umbr. *pir*, Arm. *hur*, Ir. *ūr* 'fire', on the other against the Germanic **fū(y)ira-*, OHG *fuir* with the *u* preceding. Probably Hitt. *a* and the older *a* in Toch. *por* < **paur* represent IE *a*, and the order in those languages is due to metathesis of **pū(y)ar*,⁸⁵ so that Toch. *por* represents an original dissyllabic **paūr*, which later suffered contraction, while Hitt. *pahhur* instead of contracting developed *h* as a hiatus-avoiding device; cf. AJPh 53. 199 f.

Closely related as are the consonantal systems of Hittite and Tocharian, we would expect to find traces of affinity of the two languages also in their morphological system and in this we shall not be disappointed. In the first place the earlier stage of the Tocharian declension reveals a simple system which is strikingly similar to that part of the Hittite declension which is inherited from the Indo-European. In the latter only the nominative, genitive, dative, and accusative singular and the nominative plural (also accusative?) can be directly compared with the corresponding cases of the other IE languages. Thus the nom. sing. ends in *-s*, e.g., *antuhsa-s*, *tuzzi-s*, *assu-s*; the acc. in *-n*, IE *-m*, e.g., *antuhsa-n*, *tuzzi-n*, *assu-n*; the gen. in *-as*, IE *-os* or *-ās*, e.g., *antuhsas*, *tuzzi-as*, *assu-as*; the dat. in *-i*, IE *-ei* or *-ai*, e.g., *antuhsi*, *huwasi*, *assawi*; and the nom. pl. masc. fem.⁸⁶ has *-as* (IE *-ōs* or *-ās*), *-es* (IE *-es* or *-ēes*), and *-us* (analogical), cf. *antuhsas*, *humantes*. These facts were interpreted by the writer in AJPh 51. 251 ff., to mean that when Hittite separated from the Indo-European, the latter had not as yet developed a plural declension, but had only one form for all the cases (unless the accusative is excepted). With the same interpretation the primitive Tocharian declension also seems perfectly consistent. SSS 36 f. point

assume connection between them all. Sturtevant's objection that Hittite shows a sibilant for the IE sound designated by *þ* in *taks-* 'build' beside Skt. *tākṣā*, Gr. $\tau\acute{\epsilon}\kappa\tau\omega\nu$ 'carpenter', can be taken care of by assuming that the metathesis in IE **kþōm* took place before the *þ* had become a sibilant as in *taks-*, and that in the order *þk* the first became a *t* (*d*). The question whether the *e* of Hitt. *tegan* is a secondarily developed vowel we must leave open for the present.

⁸⁵ At its best the entire complicated group of phonetically discordant forms raises difficult questions whatever is our judgment regarding the question as to which languages were the innovators in each detail. According to Sturtevant, e.g. LANG. 7. 118 f., Hittite represents the original state of affairs both in its retention of an IH *h* and the relative order of the vowels. Tocharian, however, which often corroborates Hittite in its oldest features, shows no sign of anything corresponding to such an *h* here or elsewhere.

⁸⁶ Also the IE neut. pl. nom. acc. is common in Hittite, cf. AJPh 51. 253.

out that six of the nine Tocharian cases, sc., instrumental, comitative, *ā*-case, dative, ablative, and locative, are clearly secondary, and developed by the addition of postpositions to the oblique case at comparatively late periods. In the plural also the genitive is secondary and built upon the oblique, so that the older stratum of cases in the Tocharian declension consists of three cases in the singular, sc., nominative, oblique, genitive, and two in the plural, sc. nominative and oblique, the two plural cases having the same form in the majority of words. Now as E. Fraenkel, IF 50. 10, states, the oblique is the representative of the IE accusative (note that all classes form their oblique sing. in *-m*, *-am*, or *-am*, IE *-m*, *-om*, etc., SSS 63 ff.). Tocharian therefore inherited nom. and acc. and gen. sing., differing herein from Hittite only in having no dative. We may reasonably assume that the dative was lost in the Tocharian period, but was still alive when Tocharian and Hittite separated from the Indo-European during the time when the latter had not as yet developed real local cases,⁸⁷ but only the four indispensable grammatical cases. It may even be that some IE datives are among forms labeled as genitives in Tocharian grammar, and that genitives ending in *-i* or *-e*, e.g., *lāntse* 'of the queen', go back to IE datives in *-ai* or *-ei*. However, we cannot be sure of this until the phonology of final syllables in Tocharian has been definitely established, but the supposition at least has a presumptive probability in its favor. However that may be, it is clear that the original declension of the singular coincides in its general make-up in the two languages, and the same is true of the plural, inasmuch as only the nominative is certainly inherited in both, while the question of the existence of the accusative in the parent language when Tocharian-Hittite separated, is still debatable, and on it will depend the solution of the problem as to whether the oblique pl. in Tocharian was a new case developed by analogy to the singular or was inherited.

These common features of Hittite and Tocharian nominal declension thus certainly point to an early separation of both from the parent language, although by themselves they do not answer the question whether this separation took place in common, or whether each went its own way. Nevertheless the former alternative must be the correct

⁸⁷ For the singular this conclusion is not absolutely certain, for Sturtevant, LANG. 8. 1 ff., has associated together a number of facts which seem to point to the existence of a pre-Indo-European ablative singular, and Hrozný had identified the Hitt. instrumental sing. in *-t* with the IE ablative in *-t* or *-d*. Cf. *Donum natal. Schrijnen* 367f.

one in view of the identical treatment of IE explosives, which could only be explained as a common innovation. In the same way may be interpreted, although not necessarily so, one partially common detail of the two declensional systems, sc., the use of a suffix characteristic of the genitive singular also in the plural, in Hittite as gen. dat., in Tocharian gen. only. In the former all genitives sing. and every gen. dat. pl. ends in *-as*, a fact explained AJPh 51. 258 as due to selecting for the genitive⁸⁸ from the three plural endings *-as -es -us* (all originally without case meaning) the one which had through phonetic processes either become identical in sound with the gen. sing., or so much like it as to suggest genitive use. In the same way Tocharian adopted the *-is* of the genitive singular for many genitives pl. of words which had no oblique pl. distinct from the nom., e.g. *ñemi* (translation of Skt. *rātna-m* 'jewel, wealth') forms the gen. sing. *ñemy-is*, the nom. obl. pl. *ñemi-ntu*,⁸⁹ and the gen. pl. *ñemi-ntw-is*, similarly *wram* 'res', *wram-is*, *wram-ām*,⁸⁹ *wram-n-is*. It may be that the beginnings of this innovation go back to the time of the unity of the two languages, and that Hittite made the *as*-form universal later, or else that Hittite represents the common innovation, and that other forms of the gen. pl. displaced the *is*-form in Tocharian secondarily. If there was such a common origin, we also have to assume that Tocharian at first added the *-is* to the stem-form as did Hittite, but that it later added it to the plural instead because that was the regular way of forming all the other secondary pl. cases. This difference would not therefore offer serious objection, but it weighs more heavily that the nature of the *i* of Toch. *-is* is not clear. For a definite answer to the question of the relationship of Hitt. *-as* Toch. *-is* of the gen. pl. we must wait till we know more about the history of Tocharian final syllables.

Among the forms of the personal pronouns of the two languages a telling common innovation is shown by the *u*-vowel of the pronoun of the first person sing., Hitt. *ug* or *uk*, Toch. *ñuk*, the latter being confined secondarily to the feminine. The *ñ*- of *ñuk* (also oblique) must have

⁸⁸ The use of Hitt. *-as* also in the dative pl. must be later than in the genitive.

⁸⁹ The more strangely looking plural suffixes of Tocharian, e.g. *-ām*, *-ant*, *-ntu*, are probably stem-suffixes to be compared with the German *-er* and *-en* as plural endings. Since in some instances the dropping of final syllables with short vowels had deprived certain words of the final stem suffix in the nom. acc. sing., and only of the ending in the plural, singular and plural differed mainly by the preservation of the old stem-suffix in the latter.

been carried over from the plural IE **nos*⁹⁰ so that Hitt. *uk* represents the original form of both languages. The *u* of this *uk* from IE **eġ* (LANG. 6. 167 f.) must come somehow from the second person **tu*, whether from a Tocharian-Hittite nom. **tu-k* with *k* from **eġ* > **ek*, which occurs in acc. use in Hitt. *tug tuk*, but in Tocharian only without the *k*, or whether the latter once had an acc. corresponding to Hitt. *amug amuk*,⁹¹ which was the connecting link between an acc. **tuk* and **uk*. At all events the change must have been made in common by the two languages, for they are the only IE languages with the *u* in the pronoun *I*.

In the comparison of the verbal inflection of Tocharian and Hittite not much can be made out of the similarity of stem-formation, since this is due rather to retention of the same IE formations than to the development of new ones. It may be significant, however, that both have developed beyond other languages the use of the IE present suffix *-sġo-*, found, e.g., in Skt. *gá-cchā-mi*, Gr. *βά-σκω* 'go' (IE **gʷh₂-sġō*) or Lat. *crē-sco* 'grow'. So e.g. Hitt. *akkuski-mi* 'drink copiously': *eku-zi* 'he drinks', *daski-mi* 'I take': *da(i)-*; cf. Delaporte 51 f. In Tocharian this *sġ* appears as *s* alongside of *sk* in the B dialect (SSS 358 ff.). Consequently, e.g., *pā-sa-ntār* 'they guard' (= Lat. *pā-scu-ntur*), *kām-se-ñc*, causative of *kān-* 'come into being', which is the Skt. *jan-*, Gr. *γεν-*, Lat. *gen-* < IE **ġen-*. If the spread of this formative goes back to the period of Hittite-Tocharian unity we must of course assume that the tendency of Hittite to use it in an iterative-durative sense over against the prevalent causative use in Tocharian was due to a secondary divergence.

In the system of personal endings of the two languages we find some real and striking resemblances which must be innovations performed in common. One of these, however, is not confined to Tocharian and Hittite, but extends to the other neighboring IE languages, and is therefore an early dialectic change antedating even the separation of Hittite and Tocharian. I am referring to the extension in the 1. pers. sing. of the *-mi* (primary ending) of athematic stems to thematic stems as well, which is common to the Aryan branch, Armenian, Hittite, and Tocharian. Thus with the thematic Skt. *bhārā-mi* Arm. *bere-m* 'I bear' over

⁹⁰ The reason for the palatalization of the *n* is not clear, but cf. Toch. *ñom* 'name' = Skt. *nāma* Lat. *nōmen*.

⁹¹ Hitt. *amug* was IE **eme* with added *ġ*: (either the particle **ġe* or after IE **eġ* nom. sing.). The *a* of *amug* for *e* came from the plural *anz-as*, and the *u* from *tu-g*. Cf. LANG. 6. 169.

against Gr. $\varphi\acute{\epsilon}\rho\omega$, Lat. *fero* we may compare Toch. *trānkā-m*⁹² 'I say' or *nas-a-m* 'I am'. On the Hittite side *handa-mi*⁹³ 'I establish' is like the Skt. *bandhā-mi* 'bind', and *daski-mi*⁹⁴ contrasts its *-mi* with the *-o* of Lat. *crē-sco*.

Peculiar to Hittite and Tocharian only is the entrance of the ending of the 2. sing. perf. into the present. The IE *-tha* of Skt. *vē't-tha* and Gr. *olō-tha* became *-t* in Tocharian, where all short final vowels dropped, and then became the only ending in the present, e.g. *knā-na-t* 'thou knowest', *ya-t* 'thou doest'. In Hittite on the other hand, where even short final vowels were retained, *-tha* at first became *-ta*, and then *-ti* because of the influence of the *i* of the original present endings *-si*.⁹⁵ Compare, e.g., *kven-ti* 'thou strikest' beside *kve-si* with the old present ending, *ep-ti* 'thou takest' beside *ep-si*, *harnik-ti* 'thou destroyest' without parallel form in *-si*. The Hittite thus differs from the Tocharian in not making the change universal. That the present use of the IE perfect was the bridge over which *-tha* went over to the presents is clear from the Hittite *hi*-conjugation, which perpetuates the IE present perfect, and which always shows the *-ti* which is optional for the *mi*-conjugation. Compare, e.g., *da-tti* 'thou takest', *ar-ti* 'thou arrivest'.

The most cogent morphological innovation common to Hittite and Tocharian is the entrance of forms of the *s*-aorist into the preterite active paradigm,⁹⁶ which is otherwise the heir of the IE historical perfect, although with admixture of secondary endings. These *s*-forms are confined to the same persons in both languages, sc. 2. and 3. pers. sing. and 2. pers. pl., and in all three forms they are either completely identical in both languages or point to a stage when they were identical. In second sing. the addition of the IE ending of the perfect, sc., **-tha*, to the aorist suffix *-s-* yields **-s-tha*, Hitt. *sta*, Toch. *-št*, whence, e.g., Hitt. *memi-sta* 'thou didst say', *uppe-sta* 'thou didst send', *dai-sta* 'thou didst place', Toch. *weña-št* 'thou didst say', *yāmā-št* 'thou didst make'. In

⁹² Short vowels of original final syllables (except in monosyllables) are dropped in Tocharian.

⁹³ Owing to the wiping out of IE quantitative distinctions of vowels in Hittite (AJPh 51.258) the IE verbs in the thematic vowel were confused with the *ā*-stems, so that Hitt. *handa-mi* may be taken as corresponding sound for sound with the Skt. word in its formative part.

⁹⁴ In *daski-mi* and the like the first *i* for a IE *ō* is probably due to vowel assimilation, or else is analogical to the 3. sing., where the *i* represents the *e*-grade of the thematic vowel.

⁹⁵ So Friedrich, ZDMG 76. 167.

⁹⁶ For the Hittite see now Sturtevant, LANG. 8. 119ff.

the third sing. both show *-s* without personal ending, which is no doubt due to dropping of the IE ending *-t* after *s* in both languages.⁹⁷ Compare, e.g., Hitt. *da-s* 'he took', *nai-s* 'he led', Toch. *campā-s* 'he was able', *prakā-s* 'he implored', *yāmā-s* 'he made'. In the 2. pl. *-s* also appears in both languages, although the forms are not identical otherwise. Hittite has *-s-ten*, i.e., the regular past ending is added to the *s*, e.g., *meme-sten* 'you said', *nai-sten* 'you led', but Tocharian has merely *-s*, e.g., *weñā-s* 'you said'. Undoubtedly Tocharian here originally had *s-te*, with the IE *-te* of Gr. *ἔδοτε* 'you gave', but since final short vowels dropped, and this made the *t* final after *s*, the whole *-te* ultimately disappeared. On the Hittite side of course the addition of the *-n* of *-sten* was analogical (AJPh 53. 202), so that *-s-te* was the original for both. Thus all three *s*-forms were at one time the same in Hittite and Tocharian, and that this should have been accidental is inconceivable⁹⁸—next to the changes in the explosives this is the most incontrovertible argument for a period of Hittite-Tocharian unity.

A probable common innovation of extreme antiquity is the treatment of the IE 1. pers. sing. perfect. In Tocharian this appears as preterite, the only heir of the perfect in this language. Such forms as *weñ-ā* 'I said', with long *-ā* instead of the expected short *-ā* of Gr. *οἶδ-α* Skt. *vēd-a*, can be explained as due to contraction of a stem-vowel with the *-a* of the ending and subsequent transfer of the long vowel to consonant

⁹⁷ I still consider this explanation more probable than the new one suggested by Sturtevant, 129 ff., sc. that the Hittite *s*-forms of the third sing. were perfects from aorist-stems, on the one hand because he has neglected the evidence of Tocharian, which does not vary in its stem-form before *-st* of the 2. sing. and *-s* of the 3 person, on the other because I cannot see anything significant anyway in the encroachment (analogical of course) of the *e* in Hitt. forms like *uppe-sta* from *uppa-hi*, on which he bases his argument that the two persons differed in the origin of the *s*.

⁹⁸ The difference in the sphere of usage does not weigh heavily—the Tocharian *s*-forms form a part of every preterite, while those of Hittite are confined to preterites of the *hi*-conjugation. The latter must be closer to the original state of affairs. The IE present perfect must still have existed in the period of Tocharian-Hittite unity, and the *s*-forms were then part of a complete *s*-aorist formed to express past time for these perfect-presents. However, as the *s*-aorist disappeared otherwise, and the historical perfect became the normal past tense, there resulted a composite past paradigm made up of the three *s*-forms and of perfects with past meaning. Originally these *s*-forms were confined to pasts from present perfects, whence Hittite used them only in the *hi*-conjugation, but in Tocharian this composite paradigm became the only preterite, assisted by the greater clearness of the *s*-forms e.g. in the second sing., where *-t* (IE *-tha*) had become the only present ending, and where *-st* therefore made possible the expression of past time.

stems also. If this is the case, we here have a further point of contact between Hittite and Tocharian. The writer has assumed (AJPh 53. 198 ff.) that the Hitt. *-hi*, ending of the 1. pers. sing. pres. of the *hi*-conjugation, which is the Hittite descendant of the IE present perfect, arose from this same IE *-a* by adding it to a vowel stem (cf., e.g., *da-hhi* 'I take', *mema-hhi* 'I say') and developing the *h* as a hiatus-avoiding device. This **-ha* was then changed to *-hi* under the influence of the regular *-mi* of **es-mi* 'I am' and the like.⁹⁹ Thus Tocharian and Hittite agree in adding *-a* to vowel stems in hiatus, but the hiatus was removed in a different way by each language. The great age of this change is shown by the fact that the form is a part of the preterite system in Tocharian, but of the present in Hittite. It thus precedes the break-up of the IE perfect, which itself must have taken place in the period of Hittite-Tocharian unity.

The relation of Tocharian and Hittite medio-passive *r*-endings was discussed above, with the conclusion that they were probably common innovations if other signs of an intimate relation between the two languages should also appear. After finding a number of far-reaching common changes and others of equal cogency though with a smaller sphere, we may hardly doubt that the building up of a complete medio-passive *r*-system from the one inherited form was also an innovation performed in common. It remains to point out here that also the medio-passives without *r* show a number of common traits which justify the belief that they go back to a common origin. Both languages had only one tense of the medio-passive without *r*, a tense which functions as present in Hittite and preterite in Tocharian. The latter used as present the *r*-endings, the former developed a secondary preterite, formed by adding *-t* to the personal endings of the present.¹⁰⁰ We may conclude that in the period of unity there existed a single medio-passive paradigm which was used without regard to time, but that each language developed a distinction between a present and preterite in a different way.

That this single medio-passive tense was not due to retention of a primitive state of affairs,¹⁰¹ but due to decay of the IE system, is shown by the fact that in both languages there are found primary endings beside secondary endings, i.e., the fact that the secondary endings play the principal rôle while the 1. sing. is certainly primary in Tocharian and

⁹⁹ Otherwise Sturtevant, e.g. LANG. 6. 154.

¹⁰⁰ See AJPh 53. 207f.

¹⁰¹ So Sturtevant, LANG. 7. 251.

probably in Hittite, is another indication that this syncretistic paradigm goes back to a common origin.

The secondary origin of the endings of the third persons is particularly clear. In the sing. IE *-to* yielded Hitt. *-ta*, e.g., in *ar-ta* = Skt. *ār-ta*, Gr. *ἄρ-το*, Toch. *-t* as in *kālpā-t* 'he found, attained'. In the plural similarly IE *-nto* or *-nto*, e.g., Hitt. *ar-anta*, Skt. *ār-ata*, Toch. *kālpā-nt*. In these forms Tocharian could not have lost an IE *-ai*, which becomes *-e* in the 1. sing. Rather did it lose IE *-o*, and these forms in turn make it highly improbable that Hitt. *-ta* and *-nta* come from IE *-tai* and *-ntai*, a change, which though variously assumed, loses its best support as soon as we see that these verbal endings point to the secondary *-to* only. In the 2. pl. Hitt. *-duma*, e.g., in *iya-dduma*, is the weak grade of the secondary IE *-dhyem*, Skt. *-dhvam*, (e.g. *á-bhava-dhvam* 'ye became') with *-a* through the influence of *-ta* and *-anta*. Possibly Toch. *-c*, e.g., in (*kā*)*lpā-c*, is identical with the Skt. *-dhvam*, although we cannot be certain until we know whether *y* after dentals in final syllables can be dropped. However, we do know that *c*, being the palatalized form of *t* (SSS 349 f.), may come from *dh*, and also that it presupposes a following palatal vowel (*e* in this instance), so that it seems the only doubtful question is whether to refer *-c* to *-dhe(m)* or *-dhye(m)*. In the 1. pl. Toch. *-māt* (e.g. *kālpā-māt*) is certainly equivalent to Gr. *-μεθα*, and to Skt. *-mahi*,¹⁰² only if we assume all three to come from IE *-medhā*, for *-medhi* would have become *-māc*. Since *-mahi* is secondary only, the presumption is that Toch. *-māt* also was so. How Hitt. *-was-ta*¹⁰³ is related to these forms is obscure, but it does seem as though the first element *-was* is of primary origin, but the last part *-ta* looks as though the complex was influenced by the secondary *-medhā*, Hitt. **meta*. See AJPh 53. 205 f.

In the 1. pers. sing. Toch. *-e*, e.g. *kālp-e*, certainly comes from an *i*-diphthong, which is IE *-ai* more probably than the badly established thematic *-āi*. In view of the fact that the same paradigm is a present in Hittite, it is not probable that this *-ai* is the perfect ending. Rather can we add Toch. *-e* as an additional testimony to the Sanskrit (e.g. *bruv-ē* 'I speak') and OIcel. *heite* for *-ai* as the IE primary ending.¹⁰⁴ The Hittite *-ha* probably goes back to the same *-ai* in the sense that *-ai*

¹⁰² The primary Skt. ending *-mahē* must be due to secondary ablaut (shifting) based on the ablaut IE *i* Skt. *i* : IE *ai* Skt. *ē*.

¹⁰³ The longer endings *-wastat* and *-wastati* are of course due to secondary extension of the shorter *-wasta*.

¹⁰⁴ Cf. Brugmann, Gr.² 2. 3. 642.

was changed to *-a* by assimilation to the other endings in *-a*, as *-ta-anta*, while the *h* was a hiatus-avoiding sound where this vowel was added to a vowel stem, and was then transferred to consonant stems by analogy, whence, e.g., *tapar-ha* was the result.

In the second sing. Toch. *-te*, e.g. *kālpā-te*, and Hitt. *-ta* (e.g. *pahhas-ta*), the oldest and simplest ending, agree in their consonant and undoubtedly go back to a common origin. The Hittite form here is easily explained by contamination of the two IE secondary endings, *-thēs* (e.g. in Skt. *ā-di-thās*) and *-so* (as in Gr. *ἐ-φέρε-ο* < **ἐ-φερε-σο*). Since the Hitt. form of these endings must have been **-tes* and **-sa* the *-ta* was a natural result of contamination. The Toch. *-te* was the same form with *-e* from the 1. sing.

With these various common features of the medio-passive paradigm without *r*, we can scarcely go wrong in drawing the conclusion that the paradigm as a whole, embodying these features, was developed when Tocharian and Hittite still constituted a linguistic unity.

Further evidence of the close relationship of Hittite and Tocharian is the existence in both languages of two common roots which are not found (at least in the same sense) in the rest of the IE territory. The first of these is *(i)ḡa- 'make, do', e.g. Hitt. *iya-zzi* 'he does', as Toch. *ya-ṣ*. If this should be identical with IE **yā-* 'go', as has been claimed, it would be just as necessary to assume that the strange semantic development from 'go' to 'do' was a common innovation of Hittite and Tocharian.

The second of these roots is **ai-* 'give', found most clearly in Toch. *e-*, e.g. *e-ṣt* 'thou givest', *e-ṣ* 'he gives'. In Hittite this **ai-* probably appears in *pe-pai-* 'give', e.g. *pe-hhi* 'I give', *pai-s* 'he gave', inasmuch as the prefix *pe-*, also found, e.g., in *pe-hark* 'have' (Sturtevant, LANG. 7.5 ff.), was contracted with the root. The development of this root evidently goes hand in hand with the loss in both Hittite and Tocharian of the IE **dā-* 'give', which could not maintain itself because in both languages it had become indistinguishable from **dhā-* 'place', and it was only the latter (in the sense 'take' in Hitt.) that continued to exist.

It will be advantageous at this stage to summarize the various resemblances on which the conclusions concerning the intimate relation of Hittite and Tocharian were based. Most far-reaching and compelling were the changing of all other stop sounds to voiceless unaspirated stops and the entrance of forms of the *s*-aorist into a composite preterite paradigm, sc. into the 2. and 3. sing. and 2. pl. in both languages. Equally certain although not as important is the appearance of the vowel

u in the pronoun of the 1. sing., sc. Hitt. *tug tuk* (acc. dat.), Toch. *ñuk* (nom. sing. fem.), and the occurrence of the roots **(i)ā-* 'do, make' and **ai-* 'give' in these two languages only. The other resemblances, of which some may by themselves be taken as retaining old characteristics rather than developing new ones, others are common to other languages besides Tocharian and Hittite, and still others may be interpreted as developed separately in each language, are the following: (1) identical treatment of IE labio-velars and palatals, in common with the *centum*-languages; (2) the relative position of the consonants in Hitt. *tegan*, Toch. *tkam* 'earth', and of the vowels in Hitt. *pahhur*, Toch. *por* (< **paür*) 'fire'; (3) the inheritance of a simple declension of nouns, consisting originally of nom. gen. dat. acc. sing., and nom. (also acc.?) pl.; (4) the use of a gen. sing. suffix in *-s* also in plural meaning; (5) development of the present-forming suffix *-skō-* beyond the other IE languages; (6) use of the primary ending *-mi* for the 1. pers. pres. also with thematic stems (also Skt., Iranian, and Arm.); (7) entrance of the IE *-tha*, ending of the 2. sing. perf., also into the present; (8) addition of *-a*, IE ending of the 1. sing. perfect, to vowel stems in hiatus; (9) development of a complete set of medio-passive *r*-endings from a single IE form (similarly in Italo-Celtic), but alongside of the forms without *r*; (10) formation of a single medio-passive, originally without tense-meaning, of forms without *r*; (11) development of an ending *-ta* (Toch. secondarily *-te*) for the 2. sing. medio-passive by contamination of IE *-thēs* and *-so*.

Naturally the items of the last group vary among themselves as to cogency. Thus nos. 7, 10, and 11 rank next to the characteristics of the first group in persuasiveness; and no. 3, is one of the most far-reaching of all characteristics mentioned, and also absolute proof that both separated from the parent language at an earlier date than the others, but does not by itself prove a period of linguistic unity after separation. However, if we take the second group in the light of the first, most of the chances of conflicting interpretations are removed, and even if we insist that this or that item should be explained otherwise, there can be no doubt of the meaning of the first group of facts and of all together. It is an inevitable conclusion not only that Hittite and Tocharian separated from the parent language before the others, but also that this separation took place in common, and was followed by a period in which Tocharian and Hittite developed the many characteristic innovations which are common to both.

The recognition of the close relation of the two languages affords us the opportunity to check up on theories concerning the pre-Indo-European

age of certain characteristics of Hittite when the latter stands in contrast to the previously known IE languages. It is obvious that where Tocharian agrees with the other IE languages against Hittite, as in the absence of anything corresponding to the Hittite intervocalic *h*, we cannot consider the Hittite as preserving a primitive feature. If Hittite and Tocharian disagree among themselves, but both differ from the IE state of affairs, we should be very cautious indeed about drawing pre-Indo-European conclusions from one or the other. Since we now have two more remotely related IE languages instead of one, we are in a much better position to draw valid or probable conclusions concerning this early period.

As examples of the clarifying effect of Tocharian on questions concerning the earlier Indo-European or Indo-Hittite period may be mentioned the following: Tocharian (see above) has corroborated Hittite in the conclusion drawn from the latter concerning the absence in earlier Indo-European of plural cases other than the undifferentiated form which later became nominative (AJPh 51. 253 ff.), but the existence of a dual (SSS 127 ff.) in Tocharian declensions shows that Hittite lost its dual secondarily. In the inflection of verbs Tocharian does not agree with Hittite in its paucity of forms, but shows distinctly, e.g., that the absence of both subjunctive and optative from the latter is secondary, for Tocharian knows the IE subjunctive with thematic vowel and the IE optative in *-ī-* (B also in *-oi-*). On the other hand Tocharian and Hittite agree in not having a perfect middle, a pluperfect, nor a future tense, and while this by itself is not decisive, inasmuch as the formation may have been lost by them in common, yet since the lateness of these tenses has been suspected also on other grounds, their agreement lends additional weight to the latter.

In this way, then, Tocharian is almost as important as Hittite in establishing trustworthy facts about early IE times, and always must be taken in consideration in checking theories about the latter. Even though Tocharian phonetically has decayed far beyond Hittite, as may be expected in a language whose documents are over twenty centuries later,¹⁰⁵ its forms have in many ways been more conservative than those of the latter. Instead of setting off Hittite alone against all the other IE languages, we must search for the evidence of Hittite and Tocharian combined.

¹⁰⁵ At least we can say this of the B dialect, and the dialect A can scarcely be earlier. Cf. Hirt, *Idg. Gram.* 1. 43.

A NEW INSCRIPTION OF XERXES

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[This inscription, first published by Herzfeld, is by far the longest and most important inscription of Xerxes, containing new OP words and idioms, and giving considerable historical information, in which it confirms Herodotus's account of the accession of Xerxes. But Herzfeld is wrong in interpreting it as showing that Darius, after making Xerxes co-regent, actually abdicated the throne.]

In the fourth volume of his *Archaeologische Mitteilungen aus Iran*,¹ E. Herzfeld has published an important new inscription of Xerxes, King of Persia from 486 to 465.

The inscription, he tells us, is on a block of limestone almost crystallized into marble, carefully cut into brick shape 52 x 53 x 6-11 cm., so that it closely resembles a clay tablet. It was found on November 3, 1931, in the remains of the palace harem at Persepolis, below the lowest bricks of the walls. The inscription has 48 lines, 22 on each face and 2 on each edge; the characters are written with great care, being almost stoichedon in their arrangement.²

Herzfeld has not given us a facsimile of the original, but only a normalized transcription, which is unsatisfactory in several places, especially as his method of transliterating and normalizing varies materially from that in general use. Thus he uses superior letters not only for sounds omitted in the writing, as in his normalization *Dārayava^huš*, but also for the *y* and *v* written after the corresponding final vowels: *api^v*, *pātu^v*. He doubles the graphically single consonants in *aciy* (*a-ca-i-ya*) and *pasā* (*pa-sa-a*), writing *acciy* and *passā* because the consonants are etymologically double. He omits a non-etymological *i* before postconsonantal *y*, as in his *xšāyabya* for *xa-ša-a-ya-θa-i-ya*, and thereby fails to inform us of the division of the characters between lines 11 and 12. His transcript fails also to give the division between lines 28 and 29, where the numeral is lacking; and it lacks the divider after the first word of line 45.

¹ Heft 3, pages 117-32 (Sept., 1932).

² There are 22 characters and dividers in lines 1-7, 25-31, 48; 21 characters and dividers in lines 8-24, 32-47.

The line division at 11-12 and 28-29 can be arrived at with virtual certainty because of the uniform length of the lines; but in view of the features which have been mentioned, and of some differences of interpretation which I wish to propose, it seems worth while to reprint the text here with comments on points of interest.

The inscriptions of Xerxes which have come down to us in the Old Persian are not numerous: five from Persepolis, one each from Susa, Elvend, Van, and a brief one on a vase, are all that were known until very recently, when Scheil³ published two from Susa and Herzfeld⁴ a brief one from Hamadan. Herzfeld⁵ now adds another short one from the vestibule of the *tacara* at Persepolis, which I shall call Pers. f; it is trilingual, and fragmentary, but can be restored as '(This is) Xerxes, King Darius's son, an Achaemenian.' The new inscription from Persepolis, which I shall term Pers. Hz (to suggest its discoverer), is at least half as long again as any of those previously known; but as yet no Accadian or Elamite version has been found. It contains several new words and phrases, forming a valuable addition to our scanty store of Old Persian: the new words *aciy* 21, *fraθram* 26-7 and 37, *tanum* 31, *abijāvayam* 40; the new forms *anīyai-ciy* 29, *gāθavā* 33 as abl., *apayaiy* 39; the new phrases *Auramazdām* | *avaθā* | *kāma* | *āha* 21-2 and 29-30, and *pasā* | *tanum* 31. Comments on these will be given later, as well as on other features of interest.

Of even more significance, however, is the historical information, if, as Herzfeld⁶ thinks, the inscription records that Darius elevated Xerxes to the position of co-ruler, and then abdicated the throne some time before his death. The consideration of this I have postponed to the latter part of this article.

In the normalized transliteration and in the commentary I shall change all citations into the usual symbols, employing *ç* for the sibilant which developed from *tr*; otherwise there is little likelihood of misunderstanding.

- 1 *baga* | *vazarka* | *Auramazdā* | *hya* | *imā-*
- 2 *m* | *būmīm* | *adā* | *hya* | *avam* | *asm-*
- 3 *ānam* | *adā* | *hya* | *martiyam* | *adā* |
- 4 *hya* | *šiyātīm* | *adā* | *martiyahy-*

³ Scheil, *Inscriptions des Achéménides à Suse*, Nos. 23 and 26; republished by Brandenstein, *WZfKdM* 39. 79-81, and by myself, *JAOS* 51. 226-7. Scheil's Nos. 24 and 25 belong to Darius II; cf. Brandenstein, *ib.* 83-6.

⁴ *AMI* 2. 115-6; republished by Brandenstein, *ib.* 83.

⁵ *AMI* 4. 122.

⁶ *AMI* 4. 121-4.

- 5 ā | hya | Xšayāršām | xšāyathiyam
 6 | akunauš | aivam | parūnām | xš-
 7 āyathiyam | aivam | parūnām | fram-
 8 ātāram | adam | Xšayāršā | xšā-
 9 yathiya | vazarka | xšāyathiya | xšā-
 10 yathiyānām | xšāyathiya | dahyū-
 11 nām | paruv | zanānām | xšāyath-
 12 iya | ahyāyā | būmiyā | vazark-
 13 āyā | dūrai | apiy | Dārayavaha-
 14 uš | xšāyathiyahyā | puça | Haxā-
 15 manišiya | θātiy | Xšayāršā |
 16 xšāyathiya | manā | pitā | Dāraya-
 17 vauš | Dārayavahauš | pitā | Viš-
 18 tāspa | nāma | āha | Vištāspahy-
 19 ā | pitā | Aršāma | nāma | āha | u-
 20 tā | Vištāspa | utā | Aršāma |
 21 ubā | ajīvatam | aciy | Auramaz-
 22 dām | avaθā | kāma | āha | Dārayava-
 23 um | hya | manā | pitā | avam | xš-
 24 āyathiyam | akunauš | ahyāyā |
 25 būmiyā | yaθā | Dārayavahauš | xš-
 26 āyathiya | abava | vasiy | tyā | fraθra-
 27 m | akunauš | θātiy | Xšayāršā
 28 | xšāyathiya | Dārayavauš | puçā |
 29 aniyaiciy | ahatā | Auramazdām
 30 | avaθa | kāma | āha | Dārayavauš | hya
 31 | manā | pitā | pasā | tanum | mām
 32 | maθištam | akunauš | yaθāmai
 33 | pitā | Dārayavauš | gāθavā | a-
 34 šiyava | vašnā | Auramazdahā | ada-
 35 m | xšāyathiya | abavam | piça | gā-
 36 θavā | yaθā | adam | xšāyathiya | a-
 37 bavam | vasiy | tyā | fraθram | aku-
 38 navam | tyamaiy | piça | kartam | āha
 39 | ava | adam | apayaiy | utā | ani-
 40 ya | kartam | abijāvayam | tyapati-
 41 y | adam | akunavam | utamaiy | tyā
 42 | pitā | akunauš | ava | visam |
 43 vašnā | Auramazdahā | akumā | θ-
 44 ātiy | Xšayāršā | xšāyathiya |
 45 mām | Auramazdā | pātuv | utama-

46 *iy* | *xšačam* | *utā* | *tya* | *manā* | *kar-*
 47 *tam* | *utā* | *tyamaiy* | *piça* | *kartam*
 48 | *avašciy* | *Auramazdā* | *pātuv* |

§1 (lines 1-8): A great god is Ahuramazda, who created this earth, who created yonder firmament, who created man, who created welfare for man, who made Xerxes king, one king of many, one lord of many.

§2 (lines 8-15): I am Xerxes, great king, king of kings, king of countries containing many peoples, king of this great earth far and wide, son of Darius the king, an Achaemenian.

§3 (lines 15-27): Says Xerxes the king: Darius was my father, Darius's father was named Hystaspes, Hystaspes's father was named Arsames; and Hystaspes and Arsames were both living when—unto Ahuramazda thus the wish was—Darius my father, him he made king in this earth. When Darius became king, he did much that was splendid.

§4 (lines 27-43): Says Xerxes the king: Of Darius there were other sons. Unto Ahuramazda thus the wish was—Darius my father made me the greatest after himself. When my father Darius went from the throne, by the will of Ahuramazda I became king on my father's throne. When I became king, I did much that was splendid. What had been done by my father, that I protected, and I promoted other work. What I did and what my father did, all that by the will of Ahuramazda we did.

§5 (lines 43-8): Says Xerxes the king: Me may Ahuramazda protect, and my kingdom, and what was done by me; and what was done by my father, that also may Ahuramazda protect.

1-15: these lines are identical with Xerx. Pers. a and c, except that c uses the ideogram for 'king'; also with Pers. b and d, except that these write *paruvzanānām* instead of *paruv* | *zanānām*. The inscriptions of Van and Elvend also have the same text, but with the insertion of *hya* | *maθišta* | *bagānām* after *Auramazdā* in the first line; that of Van has *paruv* | *zanānām*, while that of Elvend has *paruzanānām*, as has also Dar. Elv.

11 *paruv* | *zanānām*: with the word-divider between the two elements of the compound, and the prior part with the writing for final *u*; other occurrences of this word, see preceding paragraph. Cf. the similar division of a compound, in *ariya* | *ciça* Dar. NRa 14.

16-22: this passage closely resembles that in Darius's *Record of the Building of the Palace at Susa*,⁷ where we read:

⁷ See my article, to appear in JAOS in 1933, with bibliography; also, Scheil, Inscr. No. 1; F. W. König, Der Burgbau zu Susa; Herzfeld, AMI 3. 29-124.

- 12 *vašnā* | *Auramazdāha* | *hya* | *ma[nā* |] *pitā*
 13 [] | *Vištāspa* | *utā* | *Aršāma* | *hya* | *man[ā* | *ni]yāka* |
 14 *tyā* | *ubā* | *ajivatam* | *yadiy* | *Auramazdā* | *mā-*
 15 *m* | *XŠ[ya]m* | *akunauš* | *ahyāyā* | *BUYā* | . . .

"By the will of Ahuramazda my father Hystaspes and Arsames my grandfather, they were both living when Ahuramazda made me king in this earth . . ."

21 *aciy*: 'when', replacing *yadiy* at the corresponding point of Darius's *Record*. It is, as Herzfeld 125 says, the etymological equivalent of Gathic Avestan *ačīŋ*, Later Avestan *ačīŋ* 'then', correlative to *yačīŋ* 'when'. The demonstrative has here, as often, become a subordinating particle; cf. Latin *sī*, Eng. *that*, etc.

21-22 *Auramazdām* | *avaθā* | *kāma* | *āha*: '(unto) Ahuramazda thus the desire was', = 'thus did Ahuramazda desire'. The accusative cannot be doubted, since the idiom recurs in 29-30; it is found also in *yaθā* | *mām* | *kāma* | *āha* 'as was my desire', in Dar. Bh. 4.35-6 (without *āha*) and NRA 37-8.⁸ It is the means of reaching the correct text in Darius's *Record* 15-6, where the entire phrase is found as here, with the loss of some characters:

- 15 [A]uramazd-
 16 [ām | *ava*]θā | *kāma* | *āha* | *ha[r]uwahyāy[ā* | *BYy]ā* | *mar-*
 17 [*tiyam* |] *mām* | *avar* [*navatā* | *mā*]m | *XŠyam* | *a[kunauš]*

'(Unto) Ahuramazdā thus the desire was—in the whole earth he chose me as the man for himself, he made me king . . .'

25 *Dārayavahauš*: -*va-ha-u-ša*, the genitive written for the nom. -*va-u-ša*; an early instance of confusion of the endings, cf. nom. -*vauš* for the gen. in 28, and Herzfeld's remarks, p. 130. But in view of the correct writings of the nom. in 16-7, 30, 33, of the gen. in 13-4, 17, and of the acc. in 22-3, there may be merely an accidental interchange of the spellings in 25 and 28, where the words stand almost precisely above and below each other. I consider it likely that in the model draft from which the inscription was engraved the character *ha* was omitted from the genitive in 28, and when on verification of the copy the omission was discovered, the scribe inadvertently inserted the character in the wrong place, three lines above, where the same succession of symbols met his eye. For such wrongly made corrections, cf. my *Textual Criticism of Inscriptions* 23 (No. 3) and 36 (No. 40).

26-7 *fraθram*: it seems almost impossible not to equate this word with *frašam*, found twice in Darius's *Record*, 56-7; cf. Herzfeld 126-7. In-

⁸ Cf. TAPA 55. 60-1.

terchange of *θr* and *ç* would not be astonishing; in fact *θr* seems to be the Median equivalent of Persian *ç*. The difficulty is with the variation of *θr* and *š*, which however seems almost to be attested by the variant writings of the name of the god Mithra⁹: *m'itra* (Art. Susa 28 Scheil), *mit[ra]* (Art. Ham. 6), *m'θra* (Art. Pers. a, b), probably in *ha-miçiya* 'conspirator, rebel' (Bh. 1. 40, 80, etc.) and in the personal name *vau-misa* (Bh. 2. 49, 51, etc.), and transcribed in Elamite *mi-iš-ša*, Accadian *mi-it-ri*. Elamite *šu-ša-an* was taken into OP as *çūšā*. For the meaning of *frašam*, cf. Herzfeld, AMI 3. 1-11.

28 *Dārayavauš*: nom. for gen., cf. note on *Dārayavahauš* 25.

28 *puçā*: nom. pl., regular form for substantives.

29 *anīyai-ciy*: *anīyai-* shows the pronominal inflection¹⁰; cf. the abl. *anīyanā* with *hacā* (Dar. Pers. d 11, e 20-1), remade from **anyahmād* (= Skt. *anyasmād*) after instr. **anīyanā*. The enclitic *-ciy* (= Skt. *cid*) lends emphasis to the word; it has previously been known in *anīyašciy* (Bh. 4. 46; Xerx. Pers. a 13), *avašciy* (Xerx. Pers. a 20, ca 14 = cb 24, and now Pers. Hz 48), *kašciy* (Bh. 1. 49, 53), *cišciy* (Bh. 1. 53), *paruvamciy* (Bh. 1. 63, 67, 69), *hawciy* (Dar. Pers. e 23-4). It is noticeable that a preceding neuter *-d/-t* remains in the sandhi-value *š* before this enclitic, which shows that the combinations are old. Similarly the graphic *-y* is not written at the end of the prior part of *anīyai-ciy*, though the graphic *-v* is seen in *haw-ciy*.

30 *avaθa*: *a-va-θa*, for the usual *a-va-θa-a*, which is correct, as is shown by the Skt. ending *-thā* in *yathā*, etc. Cf. also the omission of the *a* character to show length, in *Auramazdahā* 34 and 43, for *-dāhā*.

31 *pasā*: here preposition with the acc.; formerly known only in the adverb *pasāva* from **pasā ava* 'after that', of frequent occurrence, and in *pasā | manā* Bh. 3.32 'after (= behind or with) me'.

31 *tanum*: the word is identical with Avestan *tanuš* (nom.) 'body', which in oblique cases came also to mean virtually 'self', as reflexive pronoun; cf. Bartholomae, AiW 633-6 s.v.

32 *mabīštām*: my colleague Prof. E. A. Speiser kindly supplies me with the following note on this word: It is obvious from the context that the phrase 'Darius my father made me the greatest after himself' has a profounder significance than is apparent at first glance. As it stands, the statement seems to furnish an explanation for the subsequent assumption of the throne by Xerxes. The full meaning of this somewhat cryptic announcement is probably linked with the legal usages of the

⁹ Cf. Benveniste-Meillet, Gram. du Vieux-Perse² 65.

¹⁰ On *an[iyāha | ba]gāha* Bh. 4. 61, cf. Benveniste-Meillet, op. cit. 11.

ancient East. It is well known that the first-born was favored by the laws of the Orient; his inheritance share was double that of his younger brothers. Now in a polygamous society the father often has to decide which of his sons shall have the rights of the first-born; a similar decision is usually necessary when several children have been adopted, a practice which is abundantly illustrated by the cuneiform records. Hence it is not surprising to find in wills and in documents of adoption official declarations whereby this or that son is specifically designated as the greatest (*rabū*), i.e., the first-born. The following citation from a will of the Nuzi period (1500 B.C.) may serve as an illustration: *A māria rabū ū šūma šinnišu ina zitti ileqqi ū B tertennu ū kīma šēpišu ileqqi* '(the father declares:) A shall be my eldest (*literally*, greatest) son and a double inheritance-share he shall take, and B shall be second and according to his minor portion he shall inherit' (cf. *The Annual of the American Schools of Oriental Research* 10. 53). By such a declaration a son was 'appointed' head of the family, the provision becoming effective, of course, after the death of the testator. It is very likely that the statement of Xerxes harks back to a similar usage; for it is now a commonly accepted fact that an intimate relationship existed between the laws of Elam and those of Mesopotamia. In this connection it is worthy of notice that 'after himself' could be translated into Accadian only as *arkišu*, which is also used idiomatically for 'after his death'.

33 *gāḥavā*: locative with postpositive *-ā*, where the ablative is expected. Herzfeld, 121 and 130-1, thinks that it is a graphic error for gen.-abl. *gāḥauw*, or else that the abl. form had been disused in favor of the loc. There is however a possible explanation. The form in *-auw* was perhaps abl. as well as loc.; Herzfeld, AMI 3.55, suggests that *Bābairauw* and *Hiḏauw* when after *hacā* represent a true abl. in *-aut* = Av. *-aoṭ* (cf. nom. *xratuš*, abl. *xrataoṭ*), remade from gen.-abl. *-auš* after *ā*-stem ablatives in *-āṭ*; both this abl. in *-aut* and the loc. in *-au* would be written *-auw* in OP. Now as the loc. might receive also the postposition, we find both *-auw* (as in *Bābairauw*, *Margauw*) and *-av-ā* (as in *gāḥavā*) in the locative; given an abl. in *-auw* (for *-auṭ*), analogy might create a variant abl. *-av-ā*, as here.

33-4 *ašiyava*: 'went from the throne' does not mean 'abdicated', as Herzfeld 121 takes it, but is a euphemism for 'died'; cf. the discussion in the last part of this article. In the OP inscriptions previously known, there is but one statement of the death of a king: Bh. 1. 43 *pasāva* | *Kabūjiya* | *uwāmaršiyuš* | *amariyatā* 'afterwards Cambyses died by his own death', i.e., by a death resulting from a self-inflicted wound, inten-

tional or unintentional.¹¹ But no filial or dynastic feeling here restrained Darius from the use of the verb *mar-* 'die'; it might have been otherwise if Darius had been speaking of a predecessor who was also his father, as Xerxes is here doing. Parallels for the semantic development of the phrase are easily found; in Latin, for example, a similar euphemistic use of *excedere* and *decedere* 'to depart, withdraw', and of *excessus* and *decessus* 'withdrawal, departure', is common from the time of Cicero onward. The phrase *e medio excessit* 'died' is found even in Terence, Ph. 967 (but in Hec. 620 the same idiom means merely 'to go away [to the country]').

Prof. Speiser again helps me with material from the Accadian: The disinclination of the Accadians to refer to death directly resulted in a variety of euphemistic expressions. Such circumlocutions center usually around two principal ideas: going to one's fate, and reaching the foot of one's (appointed) mountain, i.e., the universal place of judgment. Thus we find *alāku* (or *italuku*) *ana šēmti* 'to go to (one's) fate', and *alāku šēmat mūši* 'to come to the fate of night'; *emēdu* (or *ētemudu*) *šadāšu* 'to stand on one's mountain', *emēdu šahat šadīšu* 'to stand at the edge of one's mountain', *emēdu huršān* 'to stand on the universal mountain', *šabātu uruḥ šēmti* 'to take the path of fate', and the like.

There is every reason, therefore, to expect Xerxes to use a euphemism in speaking of the death of Darius.

34 *Auramazdahā*: so written, *-da-ha-a*, instead of *-da-a-ha* or *-da-a-ha-a*, which are found in inscriptions of Darius and later. The same writing is found again in 43. If it be not an outright error (Herzfeld 129), it may be an unconscious assimilation to the final of the preceding word. One may compare also the writing *XSyānām* in Dar. Ham. b (cf. Buck, Lang. 3.3), for the correct *-yānām*: there is the same relation between *-yānām* and *-yānām* as there is between *-dahā* and *-dāhā*.

39 *apayaiy*: written *a-pa-ya-i-ya*, and taken by Herzfeld to be *apiy* 'also', with the *ya* character repeated by error. But it is clearly *apa-yaiy*¹² 'I protected, conserved, preserved', a preterit middle to the root *pā-*, known in OP by the active imperatives *pādiy* (2nd sg., Dar. Pers. e 21-2) and *pātuw* (3d sg.; very common), the ptc. *pāta* (nom. sg. masc.; Dar. Pers. e 22), and the middle imperative *pati-payauwā* (2d sg.; Bh.

¹¹ Meillet, *Gram. du Vieux-Perse*¹ §286, interprets this word as 'qui a sa propre mort, sa mort naturelle'; and this interpretation is retained by Benveniste in the second edition, §286.

¹² For the personal ending, cf. Benveniste-Meillet, *op. cit.* 131, where the instances are listed.

4.38), standing for **payasva* and giving the present stem of the verb as **payataiy*, unlike the Skt. *pāyate*, which has long radical vowel.

40 *abijāvayam*: a pret. causative to the root seen in Skt. *jū-* 'to press forward, impel quickly, excite, promote, etc.', with prefixed *abi* (= Skt. *abhi* 'to, towards'), already known as prep. in OP and possibly as prefix, and common in Avestan in both uses. The form lacks the augment, unless, as Herzfeld 127 proposes, the final vowel of the prefix and the augment vowel have been contracted to *ī*, for which he finds a possible parallel in *niyasaya* NRb 5.

45-6 *utamaiy*: written *u-ta-ma-i-ya* in inscriptions of Xerxes, but *u-ta-a-ma-i-ya* = *utāmai* in those of Darius. While this may indicate a weakening or loss of final vowels by the time of Xerxes, it is noticeable that there is a certain amount of variation even in the inscriptions of Darius. See my list in JAOS 35.328.

43-48: The text, from *θātiy* onward, is identical with that of Xerx. Pers. a 17 to end.

I come now to the matter of Darius's abdication, for which Herzfeld 120-4 presents a detailed argument. Because of its importance, this must be considered at some length. The inscription states that Darius had a number of sons, but—as was Ahuramazda's wish—he made Xerxes (presumably not his eldest son, though this is not stated in the inscription) the 'greatest after himself', and that when Darius 'went from the throne', Xerxes—as was Ahuramazda's wish—became king on the throne of his father.

This account follows very closely that given by Herodotus 7. 1-4, which may be summarized as follows: After Darius received the news that his forces had been defeated at Marathon and somewhat later that Egypt had risen in rebellion, he started preparations for one campaign against the Athenians and for another against the Egyptians. At this time there was a dispute between Artobazanes, eldest son of Darius by his first wife, a daughter of Gobryas, and Xerxes, eldest son of Atossa, daughter of Cyrus the Great, whom Darius had married after his accession to the throne, as to which should have the succession. On the advice of Damaratus, exiled king of Sparta, Xerxes went to his father and pressed his claim on the ground that he was the oldest son of Darius the King, while Artobazanes was only the oldest son of Darius the private individual. Darius approved the claim, though perhaps the argument was not really needed, and named Xerxes king (*βασιλέα*) to succeed him. But before he had finished his preparations for the campaigns, Darius died; whereupon Xerxes ascended to his father's throne.

Apparently the naming of Xerxes as 'king' was necessitated by the projected departure of Darius on a campaign in distant lands; the position to which he was raised might then better be termed 'crown prince' or 'regent', than 'king'. But Herzfeld interprets the making of Xerxes to be the 'greatest after himself', as elevation to the position of co-ruler; and the 'going of Darius from the throne' as actual abdication, shortly before his death. He rejects the interpretation of 'going from the throne' as a euphemism for dying.

This view he seeks to support by an examination of the phrasing of the inscriptions of Xerxes. Now in the new inscription, lines 16-9, the copula is not expressed in the first item: 'my father Darius, Darius's father was Hystaspes by name, Hystaspes's father was Arsames by name.' The omission of *āha* 'was' in the first item he takes to be *prima facie* evidence that Darius was still living at the time of the engraving of this inscription, since, he says, only the present tense of the copula may be omitted. He notes the similar lack of the verb in the phrase *Dārayavauš | xšāyathiya | . . . hya | manā | pitā*, Xerx. Susa (duplicated in No. 23 Scheil) and Van 17-8. He overlooks, however, the fact that in the *Record of the Building of the Palace at Susa* (Scheil No. 1), the verb is omitted in the same phrase, concerning the grandfather as well as the father of Darius:

12 | *vašnā | Auramazdāha | hya | ma[nā |] pitā*
 13 [|] *Vištāspa | utā | Aršāma | hya | man[ā | ni]yāka*
 14 *tyā | ubā | ajīvatam | yadiy | . . .*

"By the will of Ahuramazda Hystaspes, who (was or is) my father, and Arsames, who (was or is) my grandfather—they both were living when . . ."

I have intentionally inserted alternative verbs in the translation; but at the time of engraving this *Record*, Hystaspes was still living and Arsames was dead; for in the final prayer for protection, at the end of the *Record*, Darius says:¹³

57 *mām | A[u]rama[zdā] | pātuv [| u]tā [| V-]*
 58 *[ištāspam | hya |] manā | pitā | utā[mai]y | DAHu[m]*

'Me may Ahuramazda protect, and Hystaspes, who (is) my father, and my country.'

Thus in the *Record*, lines 12-4, we should by Herzfeld's theory expect the present tense in the relative clause referring to Hystaspes, and the past tense in that referring to Arsames; but neither verb is expressed. Herzfeld's conclusion based on the absence of *āha* 'was' in the new in-

¹³ This restoration should be regarded as certain.

scription, therefore falls to the ground. The difference in the phrasing in this new inscription must be referred to the fact that *āha* is expressed in speaking of the remoter ancestors only, and is not needed in connection with the father who is personally well-known to him who has the inscription engraved. But the use of *āha* in 38, in 'what had been done by my father, that I protected', points rather to the view that Darius was not living when the inscription was engraved.

The longer OP inscriptions consist of four parts: first, the praise of Ahuramazda; second, the name and titles of the king; third, the special subject of the inscription¹⁴; fourth, the prayer to Ahuramazda for protection. The third section, in the inscriptions of Darius, always begins with 'Says Darius the king'. In the inscriptions of Xerxes, the third section has two introductory formulae: 'Says Xerxes the king', in Pers. a, Pers. Hz, Van, Susa (= No. 23 Scheil); 'Says Xerxes the great king', in Pers. b, c, d. On this basis, Herzfeld has divided the inscriptions into two groups, an earlier and a later. Also, as Pers. c and all those of the prior group mention Darius in some way, Herzfeld thinks that all these were inscribed in Darius's lifetime, and only Pers. b and d after his death.¹⁵

Now there are six of the inscriptions of Xerxes which contain the final prayer. All say, 'Me may Ahuramazda protect, and what was done (or built) by me'; to which Pers. a, c, Hz add 'and what was done (or built) by my father, that also may Ahuramazda protect', which is lacking in Pers. b, d, Van.¹⁶ It is decisive in the settling of this problem, that Xerxes nowhere asks Ahuramazda to protect his father Darius, though Darius asked protection for Hystaspes, in the *Record* 57-8; and

¹⁴ The third section is sometimes, as in Xerx. Pers. Hz, divided into parts, each one of which begins with the formula.

¹⁵ Herzfeld arranges the inscriptions of Xerxes in the following order: (1) While Xerxes was crown prince, Pers. f and Susa (= No. 23 Scheil); (2) during the joint regency of Darius and Xerxes, Van and Pers. a; (3) after Darius's abdication but before his death, Pers. c and Pers. Hz; (4) after Darius's death, Pers. d and Pers. b. There is no clue by which to place Pers. e, Elvend, Susa 26 Scheil, Hamadan, Vase.

¹⁶ Some have additional words in this section. Pers. c has 'and what was done by my father Darius the king, . . .'; Van, Pers. c, Pers. d, Pers. b add *hadā | bagaibiš* 'along with the gods' after the name of Ahuramazda. In the inscriptions of Darius, *hadā | viθaibiš | bagaibiš* has long been known in Dar. Pers. d 14-5, 22, 24; *hadā | bagaibiš* is now found in Susa 15 Scheil (= Brandenstein, WZfKdM 39.26 inf.) and Susa 16 E Scheil (= Brandenstein, WZfKdM 39.67). Therefore no argument on the chronology can be based on the appearance of this phrase in the prayer.

this alone is enough to place all these inscriptions after the death of Darius. It is not conceivable that the young Xerxes would have failed to ask divine protection for his father, if he were still living.

Further, the inscription of Van seems by its content to date from after the death of Darius, although it has the briefer and earlier introductory formula in §3; it says: 'Darius the king, who (is *or* was) my father, he by the will of Ahuramazda made much which (is *or* was) beautiful, and this place he commanded to dig out, wherein he did not cause an inscription to be engraved. Afterward I commanded this inscription to be engraved.' This sounds quite clearly as if only the preliminary work, the cutting out of the niche in the rock, had been completed under the orders of Darius; and that when he died the work ceased until Xerxes gave orders to engrave the inscription.

Finally, the inscriptions of Van and Pers. a have (like other inscriptions containing the usual first section) the designation of Xerxes as made by Ahuramazda to be *aivam* | *parūnām* | *xšāyaθiyam* | *aivam* | *parūnām* | *framātāram* 'one king of many, one lord of many'. It is inconceivable that Xerxes should so have designated himself while he was only co-regent with his father, as Herzfeld thinks he was at the time of these inscriptions.

For these reasons I must reject Herzfeld's view that Darius made Xerxes co-ruler with himself, and then abdicated in his favor, and must interpret *gāθavā* | *ašiyava* as a euphemism for 'died'.

POSTSCRIPT: The preceding article was finished November 26, 1932. There has just come into my hands (January 7, 1933) another publication of the same inscription by Professor Herzfeld, under the title A New Inscription of Xerxes from Persepolis, pp. viii + 14, No. 5 of Studies in Ancient Oriental Civilization, The Oriental Institute of the University of Chicago, dated August 1932. This contains plates of the inscription, taken from squeezes, confirming the line divisions which I have used in my article; but it has no linguistic material, being devoted entirely to the historical side, and agreeing entirely with the publication in AMI. What I have said above is therefore left unchanged. In his English version in the Chicago publication, however, I find 'many *fraθram*' for *vasiy fraθram*, although the untranslated word in singular in number. On the other hand, Herzfeld is doubtless right in interpreting the second paragraph as 'I, Xerxes . . . (had this made)' and in relating it to the building in which it is found, as a record of the construction, and not, as I have translated it, merely to indicate the identity of the author of the inscription.

STUDIES IN THE DICTION OF LAYAMON'S BRUT

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PART II

THE VOCABULARY OF LAȜAMON IN RELATION TO THE OLD ENGLISH POETICAL USAGE

The diction of Laȝamon is so rich, varied and expressive, and contains so many interesting features, that it is worth while to bestow a rather particular consideration upon it. The enquiry here undertaken is designed to exhibit, on the one hand, the persistence of the old poetical tradition in the use of words and phrases, and, on the other, certain departures from this in the adoption of new words, or the employment of old words or bases in new ways, or in fresh combinations, whether of words in the sentence, or of elements in compounds. If the historical and social events are borne in mind which had taken place between the writing of the latest Anglo-Saxon poetry still preserved, and the composition of the *Brut*, it will perhaps appear less remarkable that new usages should have sprung up than that so much of the old poetical and literary vocabulary should still survive. Amid all the chances and changes of the century and a half which had elapsed since the Conquest, the work of the Worcestershire poet retains the ancient poetic atmosphere, and embodies the ancient culture of his people. The *Brut* deserves to be studied with reverence and patience. It is high time that students of English should recognize that here is one of the noblest landmarks in English poetry, which expresses in a masterly manner the genius of our race. It is a rich treasure-house of early poetical English, and of stories and traditions which later poets have made immortal. Yet the young student reads it, for the most part, in mere snippets and brief extracts!

If the vocabulary of the *Brut* is compared with that of the later alliterative poems and romances written in the West Midlands, or in

the North, it is found to possess a great affinity with this. But the later poems contain a large number of Scandinavian and courtly French words which were as yet unknown to the earlier poet, and while the fourteenth and fifteenth century poems preserve some very archaic English words which, strange to say, are not found in *Lazamon*, this poet uses others which have faded from the poetical language of the fourteenth and later centuries.

The *Brut*, like Old English poetry on the one hand, and like the later alliterative poems and romances on the other, has a great wealth of words for the same thing or idea. But while the reader of the *Pearl*, or *Gawain* cannot but feel at times that what the poet has to say is not always commensurate with his means of saying it, the student of *Lazamon* is impressed by the wealth of incident, description, pageantry, and the intensity and sincerity of feeling, as well as by the imaginative power, to which the poet's glowing and opulent vocabulary gives noble utterance. The *Brut* is, indeed, as much superior to all these later alliterative poems—with the possible exception of the *Morte d'Arthur* in the Thornton MS.—in poetic quality and human interest, as it is in length.

In attempting to present a picture of the diction of so long a work as the *Brut*, a writer can but feel some hesitation as to how to arrange his material, and upon what scheme to base his analysis. That the plan here adopted will be found satisfactory by all readers it were vain to hope. It is essential, in such investigations, that the words to be considered should be classified in groups according to some definite principle. It is in any case impossible to avoid completely the effect of a glossary. Some sort of arrangement under general headings such as those selected below, in which words referring to things, ideas, or activities, naturally associated, are grouped together, seemed the most convenient. It will sometimes happen that this or that word, in respect of certain shades of meaning which it bears, appears to belong properly to more than one group. In such cases it seemed better to place the word in the class to which its usual or chief meaning entitles it to belong, and to deal there, once for all, with all its shades of meaning, rather than to distribute the word about in several categories.

In studying the diction of a poet in the way here attempted, something more is required than a mere enumeration and classification of the words he uses, together with a gloss or elementary definition of each. The essential is the spiritual and aesthetic value of the word, its atmosphere. Such things defy a rigid definition, and must be apprehended, if at all, intuitively, by a lively and cultivated sensibility. Who shall

'define' such nouns as *white*, *lætes*, or such adjectives as *feire*, *hende*, *wunsum*, and not find, when he turns to the poet's lines, that a dozen subtle spiritual or emotional values have escaped him? The only way is to quote the most pregnant passages in which the word occurs, so that it may be studied in its various settings. Only so is it possible to grasp something of what the poet has in his mind. It is true that a word has an atmosphere of its own which it imparts to a line; it is no less true that this emotional quality of a word is varied and modified in intangible ways, by the words with which it is associated in a particular context. It is important indeed to be informed what characteristic words a poet uses, but far more so to know just how he uses them.

To this end each of the words now to be discussed is, for the most part, shown in several lines, so as to exhibit them in various surroundings.

The words here dealt with come under the following headings:

Words for Human Beings:—Man, Noble, etc.; Women, Children; Groups of Human Beings.

Human Form and Features; Bodily Beauty.

Conditions of Life; External Circumstances:—Rank and Dignity. Happiness. Peace. Unhappiness. Strife. Riches and Poverty.

Human Character;—Spiritual and Physical Attributes:—Courage and Cowardice. Strength and Weakness. Mercy, etc. Cruelty. Skill, Craft, etc. Moods and States of Mind. Passions and Emotions.

Speech and Utterance:—Language; Speaking; Telling, Narration, etc. Calling, Shouting. Silence.

Revelry and Merry-making; Laughter; Song; Music.

Weeping and Lamentation. War and Battle. Arms. Attacking. Striking. Wounding. Life and Death. Sickness. Health.

Words Expressing Movement. Rapid Movement. Coming and Going.

External Nature:—Earth, Hills, Valleys. Sky. Sea. Weather. Storms. Day and Night. Light and Darkness. Rivers, Lakes, etc. Forests, Trees, Woods. Foliage, Blossom, Fruit.

Supernatural Beings:—Monsters, Giants, Fairies, Demons, etc.

A. WORDS RELATING TO HUMAN BEINGS

§1. Words applied to MEN

General = 'man, warrior, hero, etc.'

ÆBELES pl. This word in the plural has twice a perfectly general sense of 'people, men' in the *Brut*:—*þat heo wolden liðen : þurh out*

Lumbardie . and faren to Alemaine : and þa aðelene bi-winnen I.233.18-21; *seiles þer helfden : aðeles adrunken* I.335.14-15 (in a storm at sea). On the other hand, the word seems to have the more specific sense of 'nobles' in a passage where O has *cnihtes : þe Gornioille bi-pohte : whet heo don mihte. Heore þuhte swiþe eille : of æðelene hire fædere* I.139.10-14.¹

BEORN, BURN, BEARN, BERN. This is frequently used, chiefly in a general sense, sometimes, perhaps, more specifically, referring to a noble person. See on this usage Part I of these studies under *beorn*, *bearn*, etc., and under *eorl* below.

KEMPE (over 20 times). DRING 'warrior, servant' (at least 14 times); this Norse word occurs in OE (cp. *Maldon* 149). See also the compound *heredring* 'chieftain,' below. CHEORL is used very much as *ceorl* in OE, generally with the sense of 'man of low degree', and is sometimes specifically contrasted with *eorl*, as *þa wes æuer ælc cheorl : al swa bald alse an eorl* II.90.3-4. Cp. a similar contrast:—*eode swa anræd eorl to þam ceorle* *Maldon* 132. GÆDELING, which in OE has the more general sense of 'attendant, comrade', e.g. *Beow.* 2617, 2949, is applied specifically by *Lazamon* in lines immediately following those just quoted, to persons of inferior rank:—*and alle þa gadelinges : alse heo weoren sunen kinges* II.90.5-6.

HÆLEÐ, so frequent in OE poetry, is fairly common in *Brut* in MS. *Caligula*, but seems not to occur in the later text. The word has the general sense of 'man, retainer':—*He (the king) wende in to halle : and his heleðes mid him alle* II.173.8-9; in III.90.11, it means specifically 'warrior'. GUME (about 37 times). LEOUEMON etc.: is only once applied to a man, I.191.16. See this word under §4 below. RINK 'warrior' seems only to occur once: *rinkas feollon* I.221.8, which is remarkable seeing the frequency of the word in OE poetry, and the persistence of its use in the later alliterative poems and romances. SEGG, SÆGG 'man' occurs about 7 times in the older text, but never in the later, which substitutes either *man*, or some more specific word.

SCALC (10 times) is used in a general sense of 'warrior', and in II.379.2, where C has *moni bald scalc*, O substitutes *mani bold cniht*; and *cnihtes* is again substituted by O for C's *scalcs* in II.397.6. In OE, *scealc* in prose means 'servant'; in poetry, besides retaining this sense, it is used as a term of reproach; cp. *Ða hine heowon hæðene scealcas* *Maldon*

¹Unless, indeed, the sense be 'of her noble father'. Compare I.141.12 and many other passages for the word as adjective. Madden takes *æðelene* in the above passage as meaning 'state, dignity'.

181. The word has also a general sense, e.g. *Beow.* 918, and is actually applied to the Hero himself in *Beow.* 939. This is quite in accordance with the usage of the alliterative Romances.

SWEIN, the Norse form, is definitely contrasted with *cniht* in the lines *for ælc sloh adun riht:weore he swein weore he cniht* III.142.7-8; it is linked, and perhaps contrasted, with CNAUE, which is less specific, in *þer wes þe swein and þe cnaue:beinen of are laze* III.256.4-5. In the former passage the sense is apparently 'serving-man' or 'rustic'; in the latter, the force seems to be 'full-grown man'. The implication of an inferior rank is seen also in *þuhten alle þes sweines:swulche heo weoren þeines* III.153.14-15. In III.280.12, *sweines* renders Wace's *vilain*. (See refs. under *þein* below). The word is contrasted with *munc* in *isezen bi þane weien:þane swein mid munc claðen* II.123.8-9, where it clearly means simply '(lay)man, countryman'. The general sense 'man, servant', seems to come from the ON. The OE cognate *swān* means originally 'herd, swineherd'; cp. Bosworth-Toller, and the references to Glosses, etc. there given. The word has the sense 'fighting man' in *Finsburg* 41, where it echoes *sixtig sigebeorna* in the preceding line. On the other hand, the application of *swein* to nobles is clearly seen in *Lazamon* III.132.14-15: *Nu ich ileosed habbe:mine sweines leofe*, where the reference is specifically (it is Arthur speaking) to *Angel þe king* III.132.18, and to *Walwaine mi suster sune*, *ibid.* 20.

WER 'man, husband'. OE *wer* 'male human being, man'. This word occurs only once in the *Brut* uncompounded, and then in the specific sense of 'husband':—*widewen i-noze:heore weres scullen deze* II.302.14-15. The compound *burh-weren* (n.pl.) occurs II.133.21, and in the form *burze-were* (acc. or dat.) II.134.22. The second element is used instead of OE *-waru*.

WIHT 'creature' seems only to occur twice as a noun in the *Brut*. (In the reference II.582.12 *ohþe men and wihte*, given by a rare slip in Madden's Glossary, the word is an adjective). The noun in both the passages where it does occur has a vague meaning, and refers to beings whose nature is doubtful and whose character is not well defined. Thus the 'wise clerk' Magan, speaking of the mysterious earth-bound beings who take human shape as incubi or succubi, says: *Der wunieð in þan lufte:feole cunne wihte.þa þer scullen bilæfuen:þat domes-dæi cume liðen* II.236.22-25. Again, the bewildered and distressed gentlewoman, the *heor-lockede wif*, is unable quite to place the noble Earl Bedevere when he finds her in the toils of the wicked giant. *Whæt ært þu fære wiht* (MS. *whit*): *ært þu angel ært cniht?* III.26.19-20.

The word has the same sense of mystery in *Beowulf* 120, *wiht unhælo*, applied to Grendel, and again *sylicran wiht* 3038 in allusion to the fiery dragon which the hero has just slain. The word in this eerie or sinister sense is well established in OE, and the entry *unfæle men, wuduwasan, unfala wihtu, satyri vel fauni*, occurs in Ælfric's Vocabulary (cp. Wright-Walker, 108.23). Otherwise the word in OE means, generally, 'living creatures', but seems not often applied to human beings. It may be mentioned that the particular *wiht* or incubus that fathered Merlin, and whose activities provoke the explanation by Magan quoted above, is referred to by the 'nun' who was Merlin's mother, in equally vague terms, as a *þing*:—*þa fæirest þing þat wes iboren . swulc hit weore a muchel cniht* II.234.4-5, and again : *þis þing glad me biuoren* II.234.9.

WAPMON, from OE *wæpned-mon*, originally 'armed man', comes to be used simply for 'male person', as distinct from *wif-mon*. The contrast is sufficiently clear in *Of wapmen and of wifmen*: *þe schipe wel a-fulled* I.264.1-2; and *wapmon luede wapmon : wifmen heom laðe weoren* III.154.14-15; and *al þat wapmon-cun : þa mihte beren wapen* I.22.8-9.

In concluding this section, we may note that neither the old *freca* 'brave man, warrior' etc., nor *wiga* 'warrior', both common in the much later alliterative romances of the West Midlands and North, are found in the *Brut*. The base of the latter occurs in the compound *wi-æx*, however, q.v. in Part I, and in *wize* 'war' etc., q.v. under WAR and BATTLE below.

§2. Words for CHILD, LAD, BOY

BÆRN, BEARN, BERN 'child'.

CHILD.

CNAUE. This word means specifically 'child' in *þa þe time com : þat þe cnaue wes iboren* I.13.14-15; *enne cnaue zunge* II.229.18, and in the passage quoted under *swein* above. In MS. O, *cnaue child* II.226.9, the word has the force of 'male'.

3EONGLING III.147.11, 157.20.

WANCLEN 'children', OE *wencel* : *quelæn þa wifmen : quelæn þa wanclen* III.280.17-18.

§3. Words for KING, PRINCE, NOBLE

ÆLDER(E) 'prince'; see this word in Part I. Note the phrase *gumena alder* II.83.11.

ÆDEL 'king, prince':—*Coil þe king : þe wes Brutene aðel* I.430.12-13.

This is a new usage, quite unknown in OE. This word is perhaps the basis of the later *hæþel* 'hero, warrior' found in all the later alliterative poems and romances. The *h-* may be due to an early association with *hæþel*.

AÐELING 'nobleman' I.229.9; applied to a royal prince or king in *nomen Costantin aþeling : and makeden hine Bruttene king* II.113.21; and in *and haueð i-fullezed þene king : Cantuaren aþeling . Aðelbert ihaten* III.193.19-21.

CNIHT 'knight, man of noble birth'. This is one of the most interesting new developments in Layamon's vocabulary. It is used again and again in the rather general sense 'noble, warrior', as an exact equivalent of the old *beorn* and *eorl*, both of which survive. The specific sense is unmistakable in such passages as:

*ich. bitæche þe minne leofue sune . Esscol is ihaten :
and þu hine scalt iæðelien . to cnihte hine dubben.* II.521.19-22.

Or *þa men me dubbede : beizene to cnihte* III.208.6-7. Again when Carrais is introducing himself to the Roman Emperor, he says: — *ich æm ennes cnihtes sune* II.14.1-2. The epithet *kinewurðe cnihtes* II.582.2 exactly corresponds to the noble knights of later literature.

Whær beo 3e mine cnihtes : whær beo 3eo mine kempen.

whær beo 3e mine leoue men I.190.8-10 may imply a distinction between *cnihten* and *cempen* on the one hand, and the more general *men* on the other. But in

Whær beo 3e mine cnihtes : ohte men and wihte.

To horse to horse : haleþes gode ! II.462.3-6, *cniht* is the equivalent of *haleþ*.

On the distinction implied between *cniht* and *eorl* see below under the latter word.

In the compound *cnihtbearn* the first element retains its old sense of 'boy, male'; cp. the OE *cnihtcild*.

Cniht is by far the commonest word in Layamon in the vaguely general sense of 'noble warrior'.

DRIHTEN. This word appears to refer only once in Layamon to an earthly lord or ruler:

Cnihtes he (i.e. King Ebrauc) *hæfde gode : stronge and wode.*

heo wilneden after worre : for heom wes heora drihten wroð I.111.9-12.

On the whole, I take the word here as referring to the king—at least the lines seem to me to be just patient of this interpretation—although the later text renders the passage *hi welnede after werre : ware fore god ham hatede*. The word occurs in numerous passages throughout the

work in unmistakable reference to God or Christ, e.g. *seoððen ure drihten wes iboren* II.2.12; *a seinte Marie nomen : drihtenes moder* III.38.13-14; *Lauerd drihten crist* III.14.2, etc., etc.

On the other hand, *drihtliche* in the text has the sense of 'noble':—*drihtliche cnites* I.111.20. It is also applied to a queen I.124.9, and to a country, *drihtliche lond* I.10.11. In OE poetry *dryhten* refers to an earthly prince, e.g. *eorla drihten* = Hroðgar, *Beow.* 1050, and is used as a form of address by Beowulf — *dryhten Hygelac* 2000. It is also a usual appellation of God.

EORL is fairly frequently used, and generally in the sense of 'noble, warrior', as in OE poetry; it is never applied to a person of humble birth and station. It is sometimes difficult to determine whether it means more than *beorn* or *cnicht*. On the other hand the word certainly appears to have a more specific meaning, and to refer to a rank different from and superior to either of these in the enumeration of the classes of persons bidden to Arthur's great feast at Carleon:

hæhte cumen eorles : hehte cumen beornes.

hehte cumen kinges : and æc here-ðringes.

hehte cumen biscoppes : hehte cumen cnihtes.

hæhte alle þa freo-men : þauere weoren an londe. II.599.1-8.

It almost looks here as though *beorn* was equivalent to the later *squire*.

Eorl is used as a specific title implying definite rank and jurisdiction in II.268.10-11: *Aldolf (þene) eorl of Gloucestre*. *Aldolf* is also referred to as *þæ beorn Aldolf* II.267.15. It is said of Gorlois: *of Cornwale he wes eorl* II.267.13. Again the word seems to be used of the highest rank of nobility in the following:

mid him weoren eorlene sunen : of a ðele cunne iboren.

and þere hehze cnihtene sunen : þa þider weoren icumen. II.611.20-23.

Possibly *eorl* always implies hereditary nobility, or at any rate the holder of an *eorldom*, as distinct from the status of *cnicht*, which, when used specifically, refers to a rank conferred for personal service. I am unable to determine whether the word has the specific sense in *to Beduer his eorle* III.22.16, or in the further references to the same person, III.241.19, and III.26.15, or that to the Saxon *eorl* who slew Walwain, III.132.8. See under *þein* below for Wace's equivalents of *beorn*, *eorl*, and *þein*.

HÆRRE. This word is scattered throughout the *Brut* (c. 13 times) and expresses the relation of a feudal overlord to a vassal (*mon*). In III.49.18-21, the Roman Emperor promises to accept King Arthur

provided he will do homage:—*zif he wolde bi-cumen mi mon : and for lauerd me icnawen . and treouliche me heren : and me for hærre halden*; King Ælcus of Ireland says to Arthur: *ich wul beon þin underling . Ich þe wullen heren : swa mon scal don his hærren* II.521.15–17. The relation of a king to great nobles is also expressed by this word:—the two brothers Androgeus and Tennancius held these *eorl-domes*, *buten þat heo icneowen : þene king for heore herre . for he wes heore lauerd* I.306.10–13. In I.231.6, the Roman Lords, promising submission, say to King Belin: *þu ært ure hærre*. On the other hand, the word is applied by the Picts to their chief or leader, II.141 (MS. O). In OE the word (*hearra*) is far from common, except in that part of *Genesis* which is usually believed to be of Old Saxon origin. In this part, lines 235–851, it occurs, according to Bosworth-Toller, 23 times. It expresses here either the relation of God, as their lord to Satan and his hosts of rebellious angels, 263, or that of Satan to the latter, 285. The word is not found in *Beowulf*, nor, according to Simons (*Cynewulfs Wortschatz*), in any of Cynewulf's poems. In *Judith* 56 it is applied to Holofernes in relation to his retainers (*hæleþ*); in *Maldon* 204—*ealle gesawon heorð-geneatas þæt hyra heorra læg*—the reference is to the hero Byrhtnōþ. The word is far more important in the Germanic languages of the continent than in English.

HÆDMEN II.252.14 refers to the chiefs of the Britons, murdered by Hengest.

KING *passim*.

LAUERD expresses the relation of a superior to a vassal, subject or servant. It is used as a form of respectful address:—*Lauerd drihten crist* III.14.2; *Appollin mi lauer(d) ich þankie þe* I.150.14; *Lauerd Arthur buh raðe : into þine bure* II.534.14–15; *mi lauerd* I.139.19 (a queen to her husband); *wilcume lauerd* II.521.11 (to Arthur); *isihst þu lauerd þe munt* III.19.9 (a knight to his king); *Ah lauered quað Merlin* II.368.18 (to the king). It has the force of 'feudal over-lord', as when the Roman Emperor, speaking of Arthur, says:—*zif he wolde bicumen mi mon : and for lauerd me icnawen* III.49.18–19. It has the sense of 'ruler, sovereign lord, of a country':—*Asscanius : þe wes lauerd and dux* I.12.14–15. It expresses the relation of a king to a subject in:—*for euer ulc god mon : ah his lauerdes heste to don* I.101.2–3. Finally it is used for 'lord and master, husband':—*ich wulle . . . liðen him to-zænes : mid mine lauerde . fainen mines lauerdes : and is færlliche cume* I.152.18–21, where Cordelia rejoices at Lear's arrival and proposes to go with her husband to meet him. Again, where Ygærne is told that her

husband Gorlois has come (it is really King Arthur disguised):—*Dis tidinde com biliue : in to þan wife . þæt hire læwerd wes icumen* II.374.10–12. And lastly, the lines:—*ich for-ziue ælchere widewe : hire lauerdes quide* II.197.18–19, that is the promise, or undertaking, of her lord when alive.

LAUERDINGES. This word always occurs in the plural, as a form of address to an assembly, and on three occasions in the phrase *lusteð lauerdinges*. MS. O, when it records the passage, which it does three times, always writes *louerdlinges*. MS. Caligula writes *lauerdindes* in the first of the following passages, *lauerdþinges* in the second, *lauerddinges* in the third, and the correct form *lauerdinges* only in the fourth.

In ascertaining the force of such a title, or form of address, it is desirable to know who uses it to whom. In II.104.7, the phrase *lusteð lauerdinges* is used by the British Archbishop Guencelin in addressing an assemblage of Britons the status of whom is not particularized. In II.127.20 it is used by a company of Britons described as *þa cnihtes of þissen londe* (126.19). In II.196.12 the words are addressed by King Vortimer to the Papal Embassy consisting of two bishops. Finally, in III.92.1–2, the Roman Emperor, speaking to his vassals—*fif and twenti kingen . heðene uolc alle : þa heolden of Rome . eorles and dukes eke : of æstene weorlde* III.91.20–25—omits the usual *lusteþ*, and starts off *Lauerdinges . . . Mahoun eou beo liðe*. The title is evidently an honourable and friendly one, perhaps implying less formality than *lauerd*, or *þein*, and is used, as we see, by a great man addressing either equals or inferiors; in any case we find no traces of its use to superiors.

SIRE. This French word occurs only once, as a form of address followed by the name:—*wulcume sire Arður* II.521.10.

ÐEIN, ÐAIN. In OE this word has various shades of meaning: 'servant; public servant, or officer; attendant on, retainer of, a royal or princely personage; a person of superior birth, a noble; a member of the noble class; a fighting man, a warrior, hero', etc. Madden glosses the word as meaning 'thane, man, knight' in *Lazamon*. In *Beowulf* the word is applied to the most distinguished personages: to Beowulf himself, *Higelaces þegn* 194; to Hengest, *þeodnes þegn* 1085; to Wiglaf, that *þegn ungemete till* 2721. More general is *wig ealle fornam Finnes þegnas* 1081, and *cyninges þegn / guma gilp-hlæden gidda gemyndige* 867–8. I have examined some twenty-five passages in the *Brut* in which the word occurs. It seems clear that whatever other implications *þein* may have, nobility of birth or rank always appertains to those to

whom it is applied. A contrast with men of humble degree is suggested in the lines:—*þuhten alle þes sweines : swulche heo weoren þeines* III.153.14–15; and *sweines þer plozeden : blisse wes mid þeinen* III.205.19–20. The word expresses the relation of a knight or other noble to his king:—*his* (i.e. Uther's) *gode þein Ulfen* II.374.9; and *þretede Vther þene king : and alle his þeines mid him* II.356.19–20; and *scalt habben to lauerd : min alre beste þein* I.127.9–10 (Lear speaking); *þe king hefde enne þein swiþe heard* I.67.20, etc. The word refers specifically to persons of distinguished lineage in the lines:—*þe riche þein : Ridwaðelan wes ihaten . Beduerres suster sune : of heze Bruttes he wes icume* III.100.6–10; *we beoð þreo hundred cnihtes : ihelmede þeines . ohte men and kene : aðele iborene* III.64.9–12. The word is synonymous with 'knight' in:—*oðer seoue þusend : selere þeinen . hæ hede bæste : ohtere cnihten* II.331.13–16. The sense is rather more general in:—*wenden riht to þare sæ : fela þa þeines* I.47.4–5; in *Bruttes and Scottes : and moni scone þein* I.218.17–18; and in (Walwain) *sloþ þer aneþuste : þeines elleouene* III.13124–132.1; and *Heo ræsdæn to þan walle : ræize þeines* III.100.1–2. In a passage where various estates and ranks are enumerated as having perished by pestilence, Layamon follows Wace pretty closely, so that we can note the correspondence of English and French words. They are *eorles* = *seigneurs*; *beornes* = *servans*; *þeines* = *chivalier*; *sweines* = *vilain*; Layamon III.280.9 etc., Wace 16013 etc.

ÞEODEN 'king, prince'. Cp. *aledon þa leofne þeoden, / beaga bryttan on bearm scipes* (in reference to Scyld) *Beow.* 34–5. Christ is called *engla þeoden* in *Christ* 791. Madden does not recognize this ancient word in his glossary, and in the following passage translates it as 'land', mistaking it for a dative of *þeode* (q.v. §5. below). The word does not appear in Stratmann-Bradley.

De king (i.e. Constantine) *wes swiðe god cniht : and he zarkedæ his fiht. and he Maxenz of-sloþ : þer wes blisse inoh.*

þa weoren Rom-leoden : bliðen on heore þeoden.

Ða wes Costantin þe king : kæisere of Rome. II.40.4–11.

It would appear from the context that the people of Rome rejoiced, not in their 'land', but in their 'prince'.

ÞRING. This word occurs at least six times in the *Brut*, and seems to refer to a chieftain of lesser rank than an earl, in the account of Oswy's battle with Penda, in which Oswy, his son and his uncle were slain, together with five earls' sons, and nine thousand *þringes* III.276.15–21. The number of the latter is enormous compared with that of the sons of earls. The term may be used of the same class of chief when it is said

of Oswy:—*þa þringes norðerne : makeden hine to kinge* III.264.17–18. Applied to Gurmund, 'son of a very powerful king in Africa', the word has the force of 'prince', III.158.7–10. A person of importance must be indicated in the lines:—*in to þere burh senden : æfter þon hehste þringe* I.286.23–4. The word is vaguely used and might be rendered 'notables' in (*Constantine*) *heold his hustinge : of alle his Brut þringen* II.113.17–19. *Dring* seems almost equivalent to *knight* in the phrase *cnihtes and þringes* I.358.1.

§4. Words applied to WOMEN

BUR-LUTLEN 'maidens':—*þæ quene bar to drinken : and alle hire bur-lutlen* III.236.23–237.1.

BURDE 'damsel, maiden, lady.' This word, so familiar as *burd*, *bird*, in the later alliterative romances, and in Ballad Poetry, occurs at least five times in the *Brut*. It is a word implying great respect, and applied specifically to the most dignified and honourable persons. In I.387.2, *bezste alre burden* is used of the Blessed Virgin Mary. It refers to Arthur's sister in the lines:—*Æfter Arður wes iboren : þeo ædie burde . heo wes ihaten Æne* II.385.4–6. Eleine, daughter of King Howell, is called *burden alre hendest* III.29.1. It is used in the more general sense of 'woman' in the lines:—*næs nan kempen iboren : of nauer nare burden . þat mon ne mæi mid strenðe : stupen hine to grunde* III.30.4–7 'was never man born of woman who may not be subdued by force'; and again:—*Nis nauer þe mon iboren : of nauer nane burde icoren . þecunne of þan soðe : of Arðure sugen mare* III.145.16–20. The word is beginning to acquire something of the romantic suggestiveness which it has in later poetry. Whether *burde* is a form of *brud* 'bride', may well be doubted, and in spite of several suggestions that have been made, its origin remains uncertain. The O text does not use the word, and substitutes *brude* or *maide*, or, as in III.145.18, *womman*. An interesting difference may be noted in the reference to Blessed Virgin Mary in I.387.2, where O reads *of one swete may*.

BRUDE. This word is used by MS. C in exactly the same sense as *burde*, and is applied to the same young lady, Eleine, daughter of Howell, in the lines:—*he funde i þan buren : fæirest alre bruden* III.27.17–18, who is said to be no more than fifteen years old, III.28.17–18. The general sense 'young woman' is seen in: *þa þe time com : þatþecnaue wes iboren . inþere burhe : þa brude deade iwearð* I.13.14–17. It has the force of our *bride* 'wife to be' or 'married wife' in:—*þe king Latin : 3ef Lauine his douter . Eneam to are brude* I.8.6–8; also in:—*þenne hauest*

þu aboht : þe luue of þire brude II.186.11-12; and *baldliche he mitte* (= *mihte*) *þenne : zirnen him brude* II.616.19-20. In OE the word has the present meaning, but also, as in the *Brut*, the sense 'woman, wife'. Adam says of Eve when speaking to Satan:—(God) *me þas bryd forgeaf, witesciene wif* (*Genesis* 526-7).

CHIUESE 'concubine' etc. I.17.11; III.284.22. In I.271.9, the O text renders this word by *lemman*. See remarks on this under *leouemon* below.

LEOUEMON etc. 'beloved person, wife'. This word is never used in the older text in a derogatory sense. In I.9.10, it is said:—*Lauine hehte his leouemon*, that is, of Aeneas; and a few lines earlier it is stated:—*Eneas nom Lauine : leofliche to wife* I.8.23-9.1. The word is used of a man in the innocent sense of 'betrothed, lover' in I.191.16-19; it is recorded of Delgan, daughter of the king of Norway, who had been married against her will to another:—*heo hauede enne leouemon : þa heo swuþe ileoued hæfde . þene king of Denemark : þe leof hire wes on mode*. The lady is referred to by the king as *Delcan : þe zare wes mi leoue-mon* I.198.9-10, and again in line 16. Later on, when matters are happily arranged, King Guthlac of Denmark is allowed *his leouemon swa deore : to Denemark leoden* I.204.5-8. Vortiger refers to Hengest as his father, and calls himself Hengest's son, on the ground that:—*ich habbe to leof-monne : his dohter Rouwenne* II.186.20-1. Now it was previously stated in the course of this narrative, that Hengest and Rowenna had been married—*he makede heo to quene* II.177.19; it is true that 'there was neither priest nor bishop, nor ever was God's book handled', *ah an heðene wune he heo wedde* II.178.4. Again, Ygerne, wife of Gorlois, is called *his leofmon þa wes hende* II.357.7. It is significant that the later text substitutes *wif* here, and it seems that *leofmon* had acquired a fresh connotation during the period which elapsed between the writing of the earlier and later text, and that the later scribe regarded the word as unsuitable in this passage. To what extent *leofmon* had become debased in meaning, may be gathered from I.271.9, where the older text uses, quite specifically, the archaic and sinister word *chiuese*. The Otho scribe renders this by *lemman*. There is, so far as I can see, not the slightest suggestion that *leouemon* etc. is the equivalent of *chiuese* in any of the passages quoted above from the older text. The scribe of O however, must have attributed only a derogatory sense to the word even in those passages where he follows C, in spite of the context which plainly forbids this. He seems to regard *leofmon* as an improper word to apply to the spouse of Gorlois, and with reason, since by his time the word had come to have the meaning of the older *chiuese*.

LÆUEDI, LEUEDI, LEFDI, LAFDI, etc. This word in *Lazamon*, as in Old English, is the most respectful and honourable mode of address to a woman, and is usually kept, both in address and in reference, for women of the highest rank. Meaning originally 'mistress of a house', it ultimately acquired in OE, amongst other more general senses, that of 'princess, royal lady', and was used specifically of the wife of a king of Wessex. The word is applied in the *Brut* to Diana—*He clepede to pere leuedi* I.51.5, *þe læfdi* I.53.22; and to Minerva—and *læfdi heo hehte* I.121.14. As a form of address it is used by *Maglaun* to his wife and queen *Gornoille*, I.141.13; also to a less exalted person, the mother of *Merlin*—*Gode læuedi sæi me* II.232.11, etc. It is used in reference to a 'queen' in II.40.20—*þa læuedi Ælene* (mother of *Constantine*)—and has the specific sense of 'queen, sovereign lady' in I.105.20: *þa wes Guendoleine : leodene læfdi*; in I.269.11: 'Britons named the law' *æfter þare lafuedi* (i.e. *Queen Marcie*); and in reference to *Arthur's* sister *Æne*: *heo wæs inne Loeneis : leodene læfdi* II.385.10–11. The word has not yet won those complex associations of romance and chivalry which later cluster round it. Only once apparently is it used generally of the high-born dames and damsels who attend upon queens:

Alle þa quene : þe icumen weoren pere.

and alle þa lafdies : leoneden zeond walles.

to bihalden þa duzeðen : and þat folc plæie II.616.11–16.

MAIDE, MAIDEN 'virgin, damsel'. These words are interchangeable, and are both used of the same person within a few lines: of *Guinevere*, *a mæide : vrimete fæier* II.510.2–3, also line 20 on the same page: *þis maiden he gon wedde*; of *Æleine*, *þat Brutisce maide* III.38.9, but *maidene* lines 4 and 12; also of *Galarne*, *maiden* III.237.4, *maide* line 19. *Maide-child* is used once in precisely the same sense:

þat maiden wes þan kinge leof : æfne alse his azene lif.

he bad Hengest his dring : ziuen him þat maide-child . II.177.10–13.

QUENE 'woman', contrasted with *gume*:—*þu ært inhalden kene gume : hauest þu nu quene þeowwes inume ?* III.215.14–15, a remark addressed by *King Cadwalan* to his nephew *Brien* who is weeping.

ÞING 'being, creature'. The use of this word in reference to a woman is a change from OE usage; later it becomes well established in ME poetry. *Rowenna* is called *farrest alre þinge* II.174.10. Cf. *one þat is so swete a þing*, of *Blessed Virgin Mary*. *Carlton Brown*, *Religious Lyrics of the Fourteenth Century*, p. 9. No. 8.13.

WIF is used both in the general sense of 'woman', e.g. *here moder wes swiðe god wif* II.179.9; *heor-lockede wif : weop for hire wei-sið* III.25.

19-20; and *grætte Ygærne : wifuene aðelest* 88.383.4-5; and in the specific sense of 'spouse', e.g. *Arður heo nom to wife : and luuede heo wunder swiðe* II.510.18-19; *Eneas nom Lauine : leofliche to wife* I.8.24-9.1.

WIFMON, WIMMAN 'woman' in the most general sense, applied to persons of every class:—*heo wes ihaten Wenhauer : wifmonne hendest* II.510.16-17.

§5. Words for HOST, BAND, BODY OF MEN; MULTITUDE; PEOPLE, NATION

(Although several of the words in this section often apply to an armed force, they also frequently have a more general meaning. Words specifically used for 'army, fighting force', will be considered under the section 'War, Arms, etc'.)

DUGUÐ. OE *duguþ*, as Chambers points out, is often contrasted with *geoguð* 'youth' in *Beowulf* (e.g. 160), and has the sense of 'tried warriors'. The abstract meaning 'doughtiness' is rare, says Chambers, in *Beowulf*, but does occur, e.g. *syððan ic for dugeðum Dæghrefne wearð / tō hand-bonan* 2501-2. *Duguð* has the sense of 'veterans, tried warriors' in Andreas 152, where it is contrasted with *geoguð*. It has frequently the general sense of (i) 'host, multitude' and so on, e.g. *Duguð wāfæde / on þære fæmnan wite, folc eal geador Juliana* 162-3; cp. also *duguða dryhten*, in reference to God, *Crist* 782.

The word is also used in OE poetry in various abstract senses: (ii) 'glory, might':—*in cwicsule / gehynde ond gehæfte in helle grund / duguþum biðæled deofla cempa* Crist 561-3; (iii) 'joy, delight':—*hē ne findeð þær / duguþe mid dēoflum* Jul. 220-1; (iv) 'something granted, benefit, blessing, advantage':—*þætte werpeode / secgen dryhtne þonc duguða gehwylcre, / þe us sið ond ær simle gefremede* Crist 600-2; *wide tosa weð / Dryhten his duguðe* Gifts of Men 17-2; *gyf hi þa gearnunga ealle gemundon / þe he him to duguðe gedon hæfde* Maldon 196-7.

In the *Brut* the word is of frequent occurrence, but the abstract sense is very rare. Out of the fifteen passages, scattered throughout the poem, which I have examined, there is only one in which *duzeð* has beyond doubt the sense 'power, strength':—*he* (the wolf) *weneð to beon of duzeðe: baldest alre deoren* II.451-18-19. There is another passage where the word may have an abstract meaning, though Madden gives a different interpretation from that proposed below. The lines are:

*For þe king ne mai on duzeðe : bruken nanes drenches.
buten cald welles stræm : þat him is iqueme.
þat is to his ufele : aðelest alre drencche* II.405.16-21.

Madden translates *on duzeðe* by 'in the world', basing himself apparently on the dubious reading *on worle* in the O text. It seems more reasonable to take the lines as meaning 'For the king may not profitably (or, with advantage to himself), enjoy any drink but cold water, that is the best of all drinks for his malady'. I think this is borne out by *þæt him is igueme*, which is another way of saying the same thing as *on duzeðe*. The proposed interpretation is supported by the passages of OE poetry quoted above under (iv).

In all the other passages where it occurs in the *Brut*, the word means simply 'host, assembly', and sometimes 'body of retainers; army, section, party', or merely 'people, subjects'. It is not always easy to determine the precise force in a given passage; it may have been no more definite than our 'host'. It has apparently the sense 'army' in *Brutus and his duzeðe* I.77.16; that of 'retainers, supporters, armed troop' in *þa kingges weoren deaðde : heore duzeðe to-dealde . twinseden cnihtes* I.180.21-3; *Seie þu be-fore mire duzðen* I.127.18. It seems to mean 'people, subjects, kingdom' in *wham he mihte bitæchen : his dohter and his riche . and alle his dozeðe : æfter his dæie* II.57.7-10. The sense is more specific and personal in *slæn þine leoden . þe seoluen and þine duzeðen : driuen ut of londe* II.166.10-12; and *iulzed iward Adelberd king : and al his duzeðe mid him* III.183.19-20. Thus the word has a comparatively restricted significance in the *Brut*. It is to the poet simply a word with ancient and romantic associations to express a concourse of various kinds. In other ME works of the first half of the thirteenth century, *duzeð*, according to Stratmann-Bradley, preserves such abstract meanings as 'virtue, virility, nobility' which are quite foreign to *Lazamon*. The compounds *DUZEÐE-CNIHTES* I.433.16; *DUZEÐE-KING* (referring to Arthur) III.30.13; and *DUZEÐE-MONN* II.164.10, may be noted.

FLOCK 'troop, army; band, part, division'. *Dat Romanisce floc : riden heom bi-hinden* I.234.19-20; *smilen uppen Frolle : þær he wes on ulocke* II.565.14-15; *heore cun heom com azeines : mid mucle flockes* II.388.20-1. The sense 'division' is seen in *and delde a þreo ulockes : his duhtie cnihtes* III.244.9-10; *I þan flokke bi foren : he hafde cnihtes wel icoren* II.331.7-8. The word is also used of a division of a navy in *seouen hundred scipene . a formeste flokke : wið uten þa feoliende* III.159.9-11. Only once is the word used of a herd of animals:—*and þer weoren in ane (f)loken : fif hundred gaten* II.471.5-6, where C omits initial *f*-, but O writes *on flockes*.

HEP(E), **HEP(E)** 'band, company, host', etc. This word is dealt with in

Part I. It has usually a general meaning, hardly differing from that of *duzeð*. It also has the more specific sense of 'army':—*þa iwærð abolzen : a Welisc king in þe hepen* III.272.6–7. The word has further the specific sense of 'monastery' in *he hæfden on seuen hepen : sixtene hundred muneken* III.192.4–5, where O reads *abbayes*. Such phrases as the OE *þegna hēap*, *weroda hēap*, do not occur in Layamon.

HIRED 'troop, household; men of the household; host; king's court; hall'. See this word in Part I. Both the general and specific uses are there illustrated.

LEOD, LEODE, LEODEN 'people, nation, country'. Madden's glossary contains between seventy and eighty references to this word. It is never used in the sense of 'prince, lord'. It appears as a strong masculine:—*Urrian hæhte þat childe : þe iwærð þisse leodes king* I.296.23–4, but generally appears to be a feminine. It is occasionally weak(?):—*on hire leoden* I.145.9. On the whole it is a troublesome word as regards its grammatical forms, and these seem to represent those of OE *lēod* and *lēode* indifferently, together with (apparently) a form *leoden(e)* which appears as a nominative, both sing. and plural. The *-en* forms may be a weak plural used collectively, and the *-ene* forms may be either the plurals of a weak (masc.) noun, or of a strong feminine as in the OE *ō*-stems. The word is several times coupled with *lond* in the alliterative formula *lond and leode*, e.g. III.12.1.

DEODE, like OE *þeod*, has the sense both of 'people, nation', and 'country'. It has the former meaning in:—*Mine þralles i mire þeode : me suluen þretiap* I.22.2–3; *he sculden beon king of þissere þeode* II.126.5. The more usual sense is 'country':—*and driuen of mire þeoden : vncuðe leoden* II.82.20–21; *Heo ferde zeond þas þeoden : and sloh þa Romleoden* II.50.2–3; *oðer uncuðe leoden : icumen beoð to his þeoden* III.270.12–13; *zif ze bilæwen wolden : inne mire þeoden* I.45.13–16; *swa þat Romleode : comen to þissen þeoden* I.306.22–23. In the following the distinction between 'people' and 'country' is not very clear:—*muchel folc of his þeoden* I.15.9; *We scullen of þissere þeode : comen to þire neode* I.231.3–4; *baldere þeinen : of Arthures þeoden* III.96.18–19; *and walde Romleoden : and alle þa þeoden* III.50.20–21.

DRÆT. OE *þrēat* 'troop, band'. This word is very common in Old English, both in elevated prose and in poetry. It is applied both to the host of angels, and to a military force, and also to a concourse of persons generally; e.g. *mid engla þrēatum* Bede IV; *Scyld Sceþing sceapena þreatum* Beow. 4; *veras, wif somod, wornum and hēapum / ðreatum and þrymmum þrungon and urnon* Judith 163–4. Madden does not give the

sense 'troop' etc. in his glossary, but merely that of 'threat'. The former meaning is quite unmistakable in several passages:—*Ferden heo bizæten : of folke vnimete . to þere sa heo wenden : mid muchele prætte* II.389.6–9; it is true that MS. O reads *mid moche pretinge*, but the context renders the sense 'host' more likely. Further:—*for hit is feole zere : þat heore prættes comen here* III.45.4–5 (referring to the *Romleode*); *prattes vnimete : of alre laðest monne* III.203.23–24.

B. BODILY FORM AND FEATURES, BEAUTY, ETC.

§6. FORM

The words for the human form or body in the *Brut* are few in number.

BODI, which is rare in Old English, and has the senses 'status' and 'trunk', occurs twice in the *Brut*, and both times is applied to the living human body:—*De duc bi-sæh a Brenne : þe hauede bodi hende* I.209.10–11; *his bodi wes bifeong : mid fære are burne* III.24.14–15. This word gradually superseded *lic*.

HEOWE, **HUZE** has occasionally the sense of 'bodily form':—*wes þisses londes folk : leodene hendest itald . and al swa þa wimmen : wunliche on heowen* II.613.10–13; *six men : iliche on heouwen* II.403.10–11. On the other hand, the word appears to mean 'face' in *De king Leir iwerðe swa blac : swlch hit a blac cloð weoren . iwerð his hude and his heowe* I.130.12–14.

LICHE. 1. 'the body', (i) 'corpse':—*Heo nomen Morganus liche : and leide hit on vrpen . wel heo hine buriden* I.164.18–20; (ii) 'living body':—*for an his bare liche : he weorede ane burne* II.318.5–6; *Baldulf lette stiken : to þan bare lichen* II.428.17–18. 2. 'form, shape, similitude':—*on wræcches monnes liche* III.237.10.

LICAME. OE *līchama*. This word, like the preceding, is used both of living and dead bodies, but less frequently of the latter, in the *Brut*. (i) 'living body':—*þat he of his likame : lette ænne drope blod* I.326.21.22; *ah fehten ich wulle : buten ælcne cnihte . licame wið licame : bi foren mine leoden . hond azain honde : wið Arðure kinge* II.568.17–22; (ii) 'dead body':—*nimeð mine likamæ : and leggeð an chæsten* II.206.7–8.

§7. ASPECT, APPEARANCE; FACE, EXPRESSION

LÆTES, **LÆETES**, **LATES**, **LOTEN**. ON *lāt*, *læti* (in Pl.) 'manners'. This word is fairly frequent in the *Brut*, and has various shades of meaning. Stratmann-Bradley has a considerable number of references to it, including three from *Lazamon*, but the only meanings given are 'appear-

ance, pretence', which by no means fill the bill, so far as this writer is concerned. There is no trace of the sense 'pretence' in any of the seven passages I have examined. Madden gives the meaning as 'looks, glances', which also does not cover all the passages. The form *letes* occurs in a poem in Carleton Brown's Religious Lyrics of the Fourteenth Century, and is glossed as meaning 'manners, behaviour'. We shall return to this shortly. In the *Brut* the word seems to have, at one time or another, all the meanings given above except 'pretence'.

(i) In the beautiful and realistic passage, full of life and spirit, in which king Uther's wooing of Ygerne, still the wife of Gorlois, is described, we read:—*ofte he hire loh to : and makede hire letes . and [heo] hine leofliche biheold : ah i nat* (MS. inæt) *whær heo hine luuede* II.354.8-11, which must mean 'often did he smile at her and cast his eyes upon her', or 'turned his gaze upon her', or 'made eyes at her', and she 'looked at him in a bewitching manner'. I think we ought not to translate 'lovingly', since the poet adds: 'but I know not if she loved him'. There can be no doubt, however we may choose to translate it, that *letes* here means 'looks, glances', and the first two half-lines just quoted are indeed the echo of a phrase a few lines before:—*Ofte he hire lokede on : and leitede mid ezene* II.354.4-5. The last half-line means literally 'flashed with his eyes', that is, 'flashed a look, shot a glance, at her'. Perhaps some will prefer the more common-place rendering, 'glanced at her'. I think, however, we may credit the poet with the deliberate intention of using a picturesque phrase, as I know of no reason for supposing that the original fire had gone out of *leiteden*, and that the association with *lēt*, OE *lēȝet*, *līȝet* had been lost.

(ii) The commonest sense of *lætes*, etc., in the *Brut* is 'bearing, demeanour, gestures', etc. Thus:—*Ofte he custe þat weofed : mid wnsume lates* I.51.9-10; *Ða wes an liue : Vortigerne bliðe . and þa læuedi aueng : mid swiðe uære læten* II.232.1-4; *heo uerden swiðe warliche : mid wunsume lades* (sic) II.87.16-17; *freond sæiðe to freonde : mid fære loten hende . Leofue freond wæs hail* II.175.10-13. It is quite probable that in the three last passages, the words *lates*, *loten*, *læten* include under 'bearing and gestures', the sense 'gracious smiles and pleasant glances' as well.

(iii) I have noted only one passage in which the word perhaps means 'appearance, impression conveyed':—*his lætes weoren alle : swulc he lome weore* III.236.11-12, but it is not certain that we should not rather understand 'bearing, carriage, bodily movements'.

The word has the sense 'way of life, habits' in a poem from MS

Harley 2253 (early fourteenth century): *such lotes lef me leten* (Carleton Brown, Religious Lyrics, No. 6, p. 5, line 68).

LĒCHES, LECHES. This word, which is only found in C, has been thoroughly dealt with in Part I. It has the sense of 'countenance, expression of face', and also 'demeanour'.

LEORES 'cheeks, face'. OE *hlēor* 'cheek, countenance'. In the following passages the force may be either 'cheeks' or 'face':—*Brien gon to wepen . urnen þa teres : uppen þes kinges leores* III.214.21-3 (here Brien's tears drop not upon his own cheeks, but upon those of the sleeping king); *vrnen [h]ire teares : ouer hire leores* I.216.15-16 (here, the tears run over the face of the lady who is weeping).

NEBB 'face, visage; upper part of the face'. OE *nebb* 'nose, beak; face'. The general meaning 'face' is certain in the following passages:—*stille he wes iswozen : on his kinestole . me warp on his nebbe : cold welle watere* I.192.22-193.1; *his heorte gon to wakien : his neb bigon to blakien* II.407.13-14 (of a dying man); *feollen þa fæie : falewede nebbes* I.177.20-1. This phrase is used several times elsewhere in relation to those falling in battle e.g. II.552.16, III.67.221-3, and 245.10.

The sense may be either specifically 'nose', or 'face' in general, in: *he grapede an his nebbe : he wende þat hit bledde* III.215.2-3 (this refers to the king upon whose face his nephew's tears had fallen while he was asleep, see under *leores* above). Again, what precisely is implied by *nebb* in the description of the savage fight between Evelin and Herigal? *He rædde to Herigale : and smat hine swiðe sare . þat his neb and his neose : niðer ba heolden* I.349.10-13.

WONGEN 'cheeks'. OE *wang(e)*. *Wete weoren his wongen* III.215.1. This refers to the cheeks of King Cadwalan upon which his nephew wept. See under *leores* above.

§8. BEAUTY OF FACE, ETC.; THE FACE AND FEATURES; GRACE OF MANNER AND BEARING. (NOUNS AND ADJECTIVES)

(Under **FEIȜER**, **HENDE**, **LEOFliche**, **SCEONE**, **WUNlich**, the general use of these epithets is considered, in addition to their application to human beings.)

FEIȜERNESSE, **VÆȜERNESSE**, etc. This compound is rare in Old English, but Bosworth-Toller gives it as translating *pulchritudo* in Ps. 44.5.

(i) It occurs only once, so far as I can see, in the *Brut* applied to the beauty of women:—travellers had spoken of Cordelia, of *þan mæidene . feizernesse and freoscipe* I.133.7–8; *freoscipe* means 'courtesy, charm of manner', and so on.

(ii) *Feizernesse* has a wide application, being used of the beauty of external nature, e.g. in the description of the surroundings of Caerleon:—*Medewes þer weoren brade : bihalues þere burhze . þer wes fisc : þer wes fuzel : and fæiernesse inoze* II.596.26–597.3.

(iii) It also expresses non-material conditions, 'courtesy, gracious behavior':—*Me vnder-feng þene king : mid mochele feirnusse* I.139.3–4; further (iv) 'comfort, pleasant conditions':—*hu he twelf zere : seoðen wuneden here . inne griðe and inne friðe : in alle uæzernesse* II.531.10–13.

The adjective *FÆIRE*, *FEIRE* etc. is of very frequent occurrence, applied both to material and non-material things. As this is an epithet widely used among all later English poets, with many shades of meaning, it is worth while to exhibit the various ways in which it is used by Layamon.

A. Applied to human beings: (i) to women.

'Lovely':—*nes feirure child nan* I.102.6 (of Abren, daughter of *Æstrild*); *þa fæire Oriene : þes kinges dohter* II.57.15–16; *þa feire Oriene* II.59.9; *þa ueiezereste wifmen* III.2.20; *fæirest alre bruden* III.27.18; *wifmen swiðe feire* III.154.18.

(ii) Applied to men.

'Handsome, comely, proper; noble, goodly':—*seinte Albin . and þe feire Austin* I.2.22–3; *he was swa feir mon : þat wifmen hine luueden* I.297.19–20; *Malgus þe reze . þat was þe faireste mon* III.153.7–8; *he wes wis he wes fæir* III.165.19; *þis wes þe feiruste mon : þe æuere æhte ær þusne kinedom* I.174.8–9; *moni wes þe faire mon* II.599.19; *þa iwarð he swa duhti : swa þe dæi feire* I.292.1–2; *þat weoren þa feirest men* I.426.1, and II.152.19; *þa fræinede þa pape an an : of (= about) feizere þan monnen* III.181.1–2; *a swiðe fair mon* III.181.8; and *him seolf Arður þe balde : uæizerest ouer alle* III.2.22–3; *fære wiht* (of *Beduer*) III.26.19; *þe feire cniht* II.94.22; *an uæir cniht* III.118.8; *And gret þu þer Hengest : þe cnihten wes fazerest* II.476.22–3; *king Vrien : and his fæire sune Ywæin* II.599.21–2.

(iii) Applied to a people.

'Noble, honourable':—*Nes hit nohwhar iseid: . . . þat æi folc swa feire* III.174.5.7.

B. Applied to a country:—*Ich þe zifue Loenæis : þat is a lond faier* II.508.15–16; to a place, locality:—*On ane swiðe feiere stude : itimbred*

he wes ful sone III.42.7-8; to a river:—*swa heo comen a þet lond . in are swiðe feire æ* I.60.1-2 (the Loire).

C. Applied to other material objects: (i) clothing, armour:—*mid fæire are burne* (= 'burnie') III.24.15; *he on uaste iueng : fæiere his iweden* II.525.14-15; (ii) to a church:—*ane chireche swiðe faire* III.38.12; *ane swiðe feire chirche* III.183.22; (iii) to a rock:—*heo scullen uinden ænne stan : wunder ane ueire . he is ueir and brad* II.241.23-5; (iv) to a bower:—*De king hine lette bringen : into ane fære bure* II.298.14-15.

FEIRE (adv.) is used in the sense 'affably, courteously':—*and grette þen alde king . and he hine feire on-feng* I.7.3-4; also 'in comely wise, splendidly':—*alle þa þeines : alle þa sweines . feire iscrudde* II.615.16-17.

HENDE 'beautiful, handsome, fair; courteous, gracious; (?) clever, wily, dexterous; bold'. This word, so widely current in Middle English, is extremely frequent in the *Brut* with several shades of meaning. It appears to have largely the same senses as *fæzer*, but has perhaps an even wider meaning, and may imply almost every desirable quality in man, animals, and natural objects generally. It may be noted that the word is generally used predicatively, or if attributively, after the noun.

(i) The epithet is applied to women:—*Nes nan swa god wif : i þen londe þe he walde . zif heo wes a wiht hende : þat he ne makede hore* I.299.19-22; *burden alre hendest* III.29.1; *mine dohter swa hende* I.45.3; *Vther is of-longed : æfter Ygærne þere hende* II.366.14-15; *Rouwenne þe hende* II.176.15.

(ii) It is still more frequently used of men:—it precedes the noun in *an hende cniht* III.17.17; *þe swa hende cniht* I.187.4; *a swiðe hende mon* I.297.14 (of Merlin, also described as *feir mon* on the same page); *he is swiðe hende gume* II.53.15; (Arthur) *hendest alre Brutte* III.125.10; *þe alre hendest mon* II.422.7. Otherwise the word is used predicatively, or when attributive, after the noun:—*þreo cnihtes hende* III.43.8; *fæier cniht and hende* II.5.8; *Brennes wes swiðe hende* I.208.20; *Cos-tantin þe hende* II.110.5; *an ald mon swuðe hende . he wes a swiðe riche þein* II.361.7-8; *Hængest : alre cnihte hendest* II.158.17-18, and 260.2-3.

(iii) The word is used of a people, and of a host:—*wes þisses londes folk : leodene hendest itald* II.613.10-11; *his ferde of folken swiðe hende* III.12.3-4; *of folke swiþe hende* I.85.5.

(iv) Also of natural objects:—*bi þan watere þa was hende* III.190.3; *ane wude hende* III.83.18; *deoren swiðe hende* (a lion) III.120.19.

Finally, (v) to a cloak:—*ænne mantel hende* II.193.10; to a spear:—

a spære swiðe hende II.576.21; and to the Round Table, which is called *a bord swiðe hende* II.539.17.

LEOFLICH, OE *lēoflic* 'beautiful, lovely; pleasant; lovable'. The word refers in OE more to spiritual than to material beauty, but it appears to have a physical sense in at least two of the passages referred to in Bosworth-Toller:—*ac hie Sarran swiðor micle / wynsume wite wordum heredon*, / *oð þæt he lædan heht leoflic wif / to his selves sele* Gen. 1854-7. Here it is distinctly a question of physical beauty: cp. *þæs wifes wite* 1848, and *him drihtlicu mæg on wite . . . þahte* 1849-50. Cp. also *leoflic wif* Elene 286.

Lazamon uses the word chiefly in a spiritual sense:—*mid leofliche worden* II.269.4; *mid leofliche bihæste* II.363.4. In the line *beon hærsome Loðe . mid leofliche læten* II.390.12-13, the word is applied to bodily gestures perhaps, but only as expressing a state of mind. The only passage where the epithet expresses physical impressions is (*beheold he*) *þene leofliche wode* I.85.17.

SCÉONE 'fair, beautiful, handsome; eminent' etc. OE *sciene*, *scīne*, etc. has the sense 'bright, radiant', and is sometimes associated with *leoht* and *scīr*:—*cwæð he þæt his lic wære leoht and scene / hwit and hiowbeorht* Gen. 265-6; *Wrætlic is seo womb neoðan, wundrum fæger, / scīr ond scyne* Phoenix 307-8; also specifically 'beautiful': Eve is referred to by Adam as *wlitesciene wif* Gen. 527, and as *idesa scienost, / wifa witegost* Gen. 821-2; again, (*Satan*) *Wende hine wraðmod, þær he þæt wif geseah, / on eorðrice Euan stondan / sceone gesceapene* Gen. 547-9; *him þær wif curon . . . scyldfulra mægð scyne ond fægere* Gen. 1250-2. The word is also used in a spiritual sense, 'exalted, splendid':—*Forhwon forlete þu lif þæt scyne?* Crist 1470.

Lazamon uses the word most frequently in relation to womanly beauty:—*feier and sceone : mine dohter Guendolein* I.97.19-20; *mine dohter þa is scone* II.217.23; *Regau þat scone* I.131.18. On two occasions the later text has the word applied to women, where Caligula has *wel idone*:—*þe wifmon wel idone* I.412.1, for which O writes *þat was a womman scene*; and *wifmen swiðe scene* II.607.15. In II.615.1, C again reads *wifmen wel idone*, but the passage is lacking in O. The phrase *a child swipe scone* occurs in O II.35.18, where C reads *a child heom wes imene*. C, however, applies the word to the Fairy Queen:—*to Argante þere quene : aluen swiðe sceone* III.144.11-12.

Sceone is less frequently applied to men than *feizere* or *hende*, but we find *he hefde þreo sunen scene* I.89.4; *moni scone þein* I.218.4; *þat wes a Scottisc þein : scone an his londen* II.430.21-2, which probably means 'a notable (or illustrious) man in his own country'.

It is applied to a people or host in *mid sceone his folke* II.599.18, and rather differently in the lines:—*we beoð in ure londe . freo and swa scone : swa bi folc is of Rome* I.314.1-3.

The word is used of the landscape in *scen warð þa uolden* II.501.15.

WLITE 'face; beauty'. OE *wlite* a) 'appearance':—*næfne him his wlite leoge* Beow. 250; b) 'form, likeness':—*. . . æghwylces anra gelicness / horses ond monnes, hundes ond fugles, ond eac wifes wlite* Riddle XXXVII. 10-12; c) 'face':—*his wlite* translating *vultus ejus* (Ps.); d) 'glory, splendour':—*þæt he of galgan his gæst onsende / in wuldres wlite* Jul. 310-11; e) 'beauty':—*Duguð wafade / on þære fæmnan wlite* Jul. 162-3. (See also passages quoted under LEOFLICHE, from *Genesis*.) The weak OE *wlita* has the senses 'face, comeliness, beauty'.

In the *Brut* this word, whether strong or weak, has the sense of 'face, countenance, cast of features', and also 'beauty'. It is sometimes difficult to say whether the face or its beauty is referred to. Perhaps in these cases it is best to understand 'fair face', for the word is never used in a disparaging sense. The fundamental meaning is 'something radiant and shining', hence, 'a fair and radiant face; beauty in the abstract'; by a different and less specialized line of development we get the senses 'glory, splendour' in Old English.

We have the sense 'countenance, aspect, appearance' in:—*Merlin hafde a þene king : his wlite iset þurh alle þing* II.382.10-11, which refers to Merlin's restoring the king's (Uther's) face, which he had changed by his spells; cp. II.370.21-371.2. In the following references to Cordelia, the sense is apparently 'beauty', though 'face' etc. is not at all impossible:—

Feor haueden liðende men : ispeken of þan mæidene.

feizernesse and freoscipe : at-foren þan Frensce kinge.

of hire mucla fæira wlita : of hire muchela monschipe . I.133.6-11.

Again, *Heo wes þa zungeste suster : a wliton alre vairest* I.124.17-18. If we take *wliton* as plural, it may seem more probable that its force is 'features, countenance'.

'Cut off their noses and spoil their beauty' is the sense in the passage:—*þa wifmen þa ze mazen ifinden : of his nexten cunden . kerueð of hire neose : and heore wlite ga to lose* II.536.15-18.

* WUNLICHE 'pleasing; lovely, beauteous, fair'. OE *wynlic*. In OE the word is applied to the form of Satan before his fall:—*swa wynlic wæs his wæstm on heofenum* Gen. 255; also to objects of inanimate nature, e.g. it is used of the tree of life in Eden:—*Næs se wæstm gelic : / oðer wæs swa wynlic wlitig ond scene* Gen. 466-7; and of the wood in the *Phoenix*:—*sunbearo lizeð / wuduholt wynlic* Phoen. 33-4.

Lazamon employs the word in similar ways.

(i) Of human beings:—*Wenhauer*: *þe wunliche quene* II.529.20-1; *and al swa þa wimmen*: *wunliche on heowen* II.613.12-13; *he hauede bi þare wimman*: *enne swiðe wandliche* (= *wunliche*) *sune* I.271.10-11.

(ii) The epithet is more frequently applied to other objects of nature:—*Stod þe wundliche wude*: *amidden ane wælde* I.426.17-18; *þis wunliche lond* I.255.12; *þi wunliche lond* III.123.22; *Ah loke wulche wætres*: *and wunliche londes* II.66.11-12; also, *þa wunliche burh* I.402.7.

THE INFLUENCE OF A CHANGE IN PITCH ON THE ARTICULATION OF A VOWEL

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[It has frequently been suggested that a rise in cord tone is accompanied by changes in the position of the supraglottal organs of speech, but the nature and extent of these modifications have not been systematically studied.¹ This paper presents the results of an X-ray investigation of the changes which take place in the articulation of a vowel when it is pronounced first on a low pitch and then on a high pitch.]

Three male subjects, each representing a different language, were selected for the experiments. Their linguistic descriptions follow:

The American subject, hereafter referred to as A, is twenty-three years old. He was born of middle-western parents of the professional class and has lived in Chicago since the age of three. He has never been outside of the United States, has studied no foreign language, has no interest in speech sounds, and seems to speak without self-consciousness or affectation. He is a student of mechanical engineering.

The French subject, F, is twenty-seven years old. He was born in Paris, the son of a Protestant minister. Except for a year of military service in Africa and a year of study in America, he has always lived in France, mostly in Paris. In his attempts to speak English he uses French sounds almost exclusively. He is a student of theology and archaeology.

The Spanish subject, S, thirty-five years old, was born in Laredo, Texas, of Mexican parents of Spanish descent. He attended a Spanish school until he was twelve years old. He then began the study of English, which he first began to speak occasionally at the age of sixteen, although Spanish continued to be the language spoken in his home. He has taught Spanish for the last fourteen years.

¹ The action of the larynx in producing the vowels on different pitches has been investigated by L. P. H. Eijkman, 'Radiographie des Kehlkopfes', *Fortschritte auf dem Gebiete der Röntgenstrahlen*, 7. 196-206 and 310-318 (1903-1904).

The vowels which the subjects were asked to pronounce were:

A1 (American subject, first series).....	i, a, ɔ, u
A2 (second series).....	i, I, a, ɔ, u
F.....	i, e, a, o, u
S.....	i, e, a, o, u

Each series includes [i], [a], and [u], which represent three extreme positions. The two intermediate sounds [e] and [o] were used for F and S; but, since A diphthongizes these vowels, [I] and [ɔ] were substituted for them in his series.



FIG. 1. Radiograph of the vowel [e] as pronounced by the Spanish subject on the low pitch (128).

Each of the nineteen vowels was X-rayed twice, once while it was being pronounced on a low pitch, and once while it was being pronounced on a high pitch. The pitches chosen were 128 d.v.p.s. and 256 d.v.p.s. These were easily within the range of each of the three subjects.

The procedure in X-raying the articulations of the sounds was as follows: A word containing the desired vowel was spelled or shown to the subject. He first pronounced the word, then isolated the vowel, then prolonged it on the pitch given him with a pitch pipe.² The sound,

² For the first series, A1, the subject was given only the low pitch, and was told to make the high pitched sound an octave higher. For the last three series both high and low pitches were sounded. Accuracy in pitch was not insisted upon because it was found that when the attention of the subjects was concentrated on pitch the vowel produced tended to be poor in quality.

picked up by a microphone placed near the speaker, was recorded on an aluminum record.³ While the sound was being recorded an X-ray exposure of the profile of the organs of speech was made.⁴ One of the radiographs is shown in Figure 1.

In order to check the pitch on which each sound was pronounced oscillograms were made from the aluminum records.⁵ It was found that the pitches pronounced differed somewhat from the pitches given, but for the purposes of this investigation the variations were not great enough to be significant.

The X-ray evidence was prepared for study and comparison by making composite tracings. Figure 2 shows one of the tracings. It was

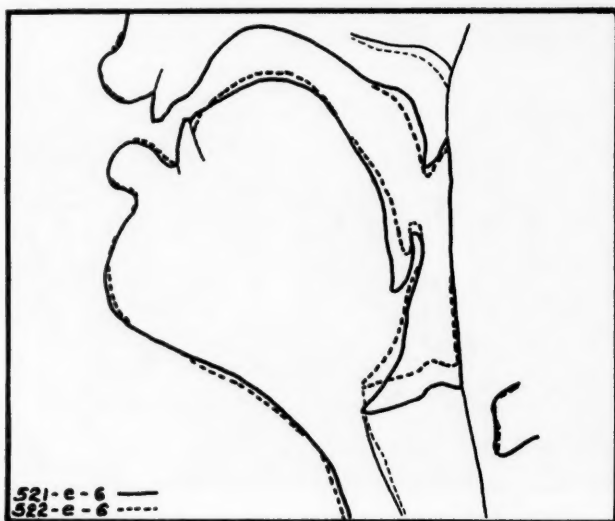


FIG. 2. Composite tracing of [e] as pronounced by the Spanish subject at 128 (solid line) and 258 (broken line).

made as follows: From the X-ray of low [e], subject S, the median outline of the cavity was traced on transparent paper. The high [e] of the same subject was traced in the same way. These two tracings were then superposed so that the fixed portions of the skull coincided. Wherever the two articulations of the sound differed the outlines of the

³ The recording was done on a Pam-o-graph.

⁴ For the details of the method used see Parmenter, Treviño, and Bevans, 'A Technique for Radiographing the Organs of Speech during Articulation', *Zeitschrift für Experimental-Phonetik*, 1.63-84 (1931).

⁵ For the details of making and measuring oscillograph records for pitch see Parmenter and Treviño, 'A Technique for the Analysis of Pitch in Connected Discourse', *Archives Néerlandaises de Phonétique Expérimentale*, 7.1-29 (1932).

cavities diverged. In the composite the outline for the low sound is shown by the solid line. The broken line shows the outline for the high sound wherever it differs from the low. The differences between the two articulations are thus clearly visible.

TABLE I

The vocal cords. A rise for the high pitch is indicated by +.

	i	ɪ	e	a	ɔ	o	u	Av. for subjects
A	+6.5	+10		+9	+8.5		+8.5	+8.3
F	+3		+2	+6		0	+7	+3.6
S	+5		+8		+8	+7	+11	+7.8
Av. for sounds	+4.8	+10	+5	+7.7	+8.5	+3.5	+8.8	+6.6

TABLE II

The width of the lower throat. An increase in the distance between the epiglottis, at a point 2 cm. above the cords, and the back wall of the pharynx for the high pitch is indicated by +.

	i	ɪ	e	a	ɔ	o	u	Av. for subjects
A	+2	+4		+3	+6.5		+6.5	+4.4
F	+4		+4	+2		+7	+6	+4.6
S	-1		-1	-1		+1	0	-.4
Av. for sounds	+1.7	+4	+1.5	+1.3	+6.5	+4	+4.2	+2.9

TABLE III

The distance between the tip of the epiglottis and the back wall of the throat. An increase for the high pitch is indicated by +.

	i	ɪ	e	a	ɔ	o	u	Av. for subjects
A	-4.2	0		-1.2	+1.5		-5	-2.1
F	+4		+3.5	+1		+3.5	+2.5	+2.9
S	-1		0	+2		0	-1	0
Av. for sounds	-.4	0	+1.7	+.6	+1.5	+1.7	-1.2	+.3

Measurements were made at selected points from the glottis to the lips in order to compare the shifts quantitatively. These measurements are given in Tables I to XII.⁶ For example, Figure 2 shows the vocal

⁶ The comparisons in these tables are based on measurements of every radiograph made during the course of the investigation.

cords 8 mm higher for the production of Spanish [e] on the high pitch. This rise of 8 mm is recorded in Table I. The cord rise for each sound of this series appears in the third horizontal column of this table with the average rise for all the vowels at the end. The vertical column shows the cord rise for the [e] of each subject with the average at the

TABLE IV

Height of epiglottis. A rise in the tip of the epiglottis for the high pitch is indicated by +.

	i	ɪ	e	a	ɔ	o	u	Av. for subjects
A	+2.2	+15		+4.7	+8		+4.7	+6
F	+5		+2.5	+4.5		0	+4.5	+3.3
S	+2.5		+3	+3.5		+5	+5.5	+3.9
Av. for sounds	+3.2	+15	+2.7	+4.2	+8	+2.5	+4.9	+4.4

TABLE V

The hyoid bone. A rise for the high pitch is indicated by +.

	i	ɪ	e	a	ɔ	o	u	Av. for subjects
A	+9	+17		+12.5	+11.5		+14	+12.3
F	+3		+4	+6		+3	+8	+4.8
S	+3		+4	+3		+4	+6	+4
Av. for sounds	+5	+17	+4	+7.2	+11.5	+3.5	+9.3	+7

TABLE VI

The arch of the tongue. A rise for the high pitch is indicated by +.

	i	ɪ	e	a	ɔ	o	u	Av. for subjects
A	-1.5	0		+4.2	+3.2		+2.7	+1.9
F	-1.5		+1.5	+2		+1	-1	+ .4
S	-1		+2	0		+1.5	+ .5	+ .6
Av. for sounds	-1.3	0	+1.7	+2.1	+3.2	+1.2	+ .7	+1

bottom. The most significant number is the average for all the sounds of all the subjects, which appears in bold face at the lower right hand corner of each table.⁷ The points at which measurements of shift in

⁷ The figures given for A are averages of the measurement made of series A1 and A2 whenever the sound occurred in both series. The average for A is based on the measurements of the nine composites of A.

position were made are: vocal cords, Table I; width of throat near base of epiglottis, Table II; width of throat at tip of epiglottis, Table III; height of tip of epiglottis, Table IV; height of hyoid bone, Table V; height of tongue arch, Table VI; distance from dorsum of tongue to back wall of pharynx, Table VII; height of blade, Table VIII; jaw opening,

TABLE VII

The dorsum. A shift of the tongue toward the back wall of the pharynx for the high pitch is indicated by +.

	i	ɪ	e	a	ɔ	o	u	Av. for subjects
A	+3	+6.5		+5	+5		+1.5	+2.9
F	-1		+1	+4		-2	+5	+1.4
S	+1		+3	-4		-2	0	-.4
Av. for sounds	+1	+6.5	+2	+1.7	+5	-2	+2.2	+1.3

TABLE VIII

The blade of the tongue at a point midway between the highest point of arching and the tip. A rise for the high pitch is indicated by +.

	i	ɪ	e	a	ɔ	o	u	Av. for subjects
A	-1	-2		+3.7	+4		+1.2	+1.6
F	-2		0	0		+2.5	0	+.1
S	-.5		+1.5	+1.5		+2.5	+2.5	+1.5
Av. for sounds	-1.2	-2	+.7	+1.7	+4	+2.5	+1.2	+1.1

TABLE IX

The jaws. Greater closure for the high pitch is indicated by +.

	i	ɪ	e	a	ɔ	o	u	Av. for subjects
A	+.5	+.5		+3	+1.5		-2.8	+.6
F	-3		-1	0		+1	+1	-.4
S	-1		-.5	0		+.5	+2	+.2
Av. for sounds	-1.2	+.5	-.7	+1	+1.5	+.7	+.1	+.1

Table IX; and lip opening, Table X. Averages by sounds are shown in Table XI, and averages by subjects in Table XII.

An examination of the averages shows the following results, which indicate the general tendency of the articulatory shifts accompanying an upward change in pitch of one octave:

The vocal cords are 6.6 mm higher and the length of the pharyngeal cavity is decreased by this amount.

The width of the throat at a point 2 cm above the cords, as measured from the lower part of the epiglottis to the back wall of the pharynx,

TABLE X

The lips. Greater closure for the high pitch is indicated by +.

	i	ɪ	e	a	ɔ	o	u	Av. for subjects
A	-1.5	0		+3	+2		-4	-.1
F	-3		-2	+2		-.5	+1.5	-.4
S	0		+ .5	+2		0	- .5	+.4
Av. for sounds	-1.5	0	- .7	+2.3	+2	-.2	-1	-.04

TABLE XI

Shifts by sounds. Signs as in Tables I-X.

	I	II	III	IV	V	VI	VII	VIII	IX	X
	Vocal cords	Lower throat	Tip of epiglottis	Height of epiglottis	Hyoid bone	Arch	Dorsum	Blade	Jaws	Lips
i	+4.8	+1.7	- .4	+3.2	+5	-1.3	+1	-1.2	-1.2	-1.5
a	+7.7	+1.3	+ .6	+4.2	+7.2	+2.1	+1.7	+1.7	+1	+2.3
u	+8.8	+4.2	-1.2	+4.9	+9.3	+ .7	+2.2	+1.2	+ .1	-1

TABLE XII

Articulatory shifts by subjects. Signs as in Tables I-X.

	I	II	III	IV	V	VI	VII	VIII	IX	X	Total Av. shift
	Vocal cords	Lower throat	Tip of epiglottis	Height of epiglottis	Hyoid bone	Arch	Dorsum	Blade	Jaws	Lips	
A	+8.3	+4.4	-2.1	+6	+12.3	+1.9	+2.9	+1.6	+ .6	- .1	40.2
F	+3.6	+4.6	+2.9	+3.3	+4.8	+ .4	+1.4	+ .1	- .4	- .4	21.9
S	+7.8	- .4	0	+3.9	+4	+ .6	- .4	+1.5	+ .2	+ .4	19.2

averages an increase of 2.9 mm. This widening is accompanied by a forward motion of the thyroid cartilage.

The tip of the epiglottis rises 4.4 mm, which is less than the average rise of the cords. Its distance from the back wall of the pharynx shows an average increase of .3 mm. The fact that the increase in the width of

the cavity at this point is less than it is in the lower throat is probably due to the backward movement of the dorsum, which tends to prevent the tip of the epiglottis from moving forward.

The hyoid bone rises an average of 7 mm. This, of course, involves a rise in the root of the tongue.

The highest point of the arch of the tongue shows, however, a rise of only 1 mm.

The combination of a small shift in the arch of the tongue with a large shift in its base necessitates a change in the shape of its profile. That such a change occurs is shown by the fact that the dorsum moves 1.3 mm toward the back wall of the pharynx and that the blade, at a point half-way between the arch and the tip, rises 1.1 mm.

The opening of the jaws as shown by the distance between the upper and lower incisors is only .1 mm greater for the high pitch, and the opening between the lips decreases .04 mm for the high pitch.

To resume: for the higher pitch the back cavity is shorter, its width at the base of the epiglottis is greater, at the tip of the epiglottis slightly greater, above the epiglottis narrower, the front cavity narrower, and the opening (lips and jaws) shows no significant change. As to the magnitude of the changes, they are greatest at the vocal cords and least at the lips. In other words, the changes in the pharyngeal cavity are greater than those in the buccal cavity.

SOUNDS

The above conclusions are based on averages for the changes for all sounds. Not every sound, however, conforms to the general trend. Different vowels react to a rise in pitch in different degrees and sometimes even in different directions. Table XI gives the average changes for [i], for [a], and for [u]. The larynx, which on the low pitch is lowest for [u], and highest for [i], rises most for [u], and least for [i], when the pitch is raised. The widening of the laryngeal pharynx (averaging the measurements from Tables II and III) is also greatest for [u] and least for [i], as is the shift in the dorsum. Thus the magnitude of the change in the back cavity as a whole decreases in the order [u], [a], [i]. In the buccal cavity the change for [i] differs from that for the other sounds not only in amount but in direction. The tongue is lower at arch and blade, and the lips and jaws are more open. The front cavity for [i], then, is wider for the high pitch. The front cavities for [u] and [a], on the contrary, are narrower at all the points measured, except that the lips open 1 mm for [u]. The changes for [a] are greater than those for [u] at every point.

SUBJECTS

Table XII shows the average changes made by each subject at each point measured. The total average shift given in the column at the right shows that the American makes a change about twice as great as that of either the French or Spanish subject. Whether the differences in these totals are due to personal characteristics or are typical of the languages cannot be determined on the basis of a single subject for each language.

CONCLUSION

From this experiment it is apparent that important modifications occur in the articulation of a vowel when its pitch is raised an octave. These modifications may, for convenience, be treated under three headings: (1) the rise of the larynx, (2) changes in the supraglottal cavities which are probably due to the rise of the larynx, and (3) changes in these cavities which are probably not due to the rise of the larynx.

Two explanations of these shifts suggest themselves, one physiological, the other acoustical. According to the physiological explanation certain muscular contractions take place in the larynx when the pitch is raised, and the positions of the other organs are modified by direct action such as the pushing of one organ against another or the irradiation of muscular tension. According to the acoustical explanation, when the pitch of the fundamental is raised changes are made in the size and shape of the supraglottal cavities in order to maintain the best resonance for the overtones which characterize the quality of the vowel.⁸

The movement of the larynx might be explained according to either theory. Physiologically a rise in the larynx helps to tighten the vocal cords and thus raise the pitch.⁹ The vertical movement of the larynx may therefore occur merely to aid in raising the pitch of the fundamental. An acoustical explanation of this phenomenon is not precluded, however, since a shift in the position of the larynx is not necessary for a change in pitch.¹⁰ As has been seen, the height of the larynx is different for different vowels pronounced on the same pitch. This indicates that a change in its height is regularly associated with a change in the quality of the sound produced. The rise of the larynx may therefore aid in tuning the cavities to match the new fundamental.

It follows that the shifts in the lower throat, which are for the most

⁸ On the automatic retuning of the cavities with each change of larynx note see Sir Richard Paget, *Human Speech* (London, 1930), especially chapter XI.

⁹ V. E. Negus, *The Mechanism of the Larynx* 382-3 (London 1929).

¹⁰ *Ibid.*

part explainable as results of the action of the larynx, are likewise susceptible of explanation by either theory. The arch and blade of the tongue and the lips and jaws are, however, so far removed from the larynx that they would seem to be comparatively independent of it. Furthermore, the degree and nature of the modifications which take place in the buccal cavity are such that they are not easily accounted for by the physiological explanation alone. Here, even more than in the larynx and lower throat, the evidence seems to admit an acoustical explanation of at least a part of the change.

MISCELLANEA

ATHEMATIC VERBS DURATIVE, THEMATIC VERBS MOMENTARY

In LANGUAGE 3. 86 (1927) I suggested that 'perhaps athematic verbs originally had no primary accent of their own, but at most only secondary accents. . . . In other words, the athematic verb may have been originally an enclitic, and the non-enclitic verb, which had a primary accent of its own, may have had the thematic form. . . . This suggestion is advanced, however, merely as a working hypothesis, not as a reasoned theory, and much less as a demonstrated explanation.'

A more careful study of the subject seems to give reason to suppose that the athematic verbs were primarily durative in aspect, while the thematic were momentary. The two classes are represented most extensively in Greek; Albanian retains only *jam* 'am', *thom* 'speak', *kam* 'have' (<**qap-mi*, cf. Lat. *capio*, or **qab(h)-mi*, cf. Goth. *haban*; aorist *patšë*, cognate with Skt. *pāti-* 'lord', etc.); OHGerm. has, besides the copula, only *tuom* 'do', *gām* 'go', *stām* 'stand', and Anglo-Saxon (Mercian and Northumbrian) *dóm*, *fléom* 'flee', *geséom* 'see'; OCSlav. shows only *jesmĭ* 'am', *jamĭ* 'eat', *damĭ* 'give', *imamĭ* 'have'.

Excluding in Greek the copula and the terminative and iterative types of *δείκνυμι* (aorist *ἔδειξα*; cf. the type of *μανθάνω: ἔμαθον*) and *τίθημι* (aorist *ἔθηκα*),¹ one finds² that the overwhelming majority of athematic verbs have only presents and imperfects, but no aorists or perfects: *ἀγαμαι* 'love' (beside *ἀγάομαι*; *ἔραμαι* 'love', on the other hand, has aorist, imperfect, and [late] perfect; so also *στέργω* and *φιλέω*), *ἄημι* 'blow' (but cf. Brāhmaṇic aorist *avāsīt*), *ἄννυμι* 'accomplish' (Skt. *sanóti*, but Vedic aorist *asanam*, etc.), *δέαμαι* 'appear' (beside *δοάζω* with aorist only), *δίημι* 'chase' (beside *δίω* with imperfect and perfect only; cf. Ved. *dī'yati*), *ἡμί* 'say' (cf. *λέγω* with *εἶρηκα* as perfect; *εἶπον* as aorist

¹With Greek *δίδωμι* (cf. OLith. *dúomi*), *ἵημι*, *τίθημι* (cf. OLith. *díedmi*) cf. the suppletive Alb. *ap: ðaše*, OIr. *do-beir: do-rat*, and Alb. *fi: ndeña*, OIr. *cuir: rolá*; with *κτείννυμι* beside *κτείνω* cf. Skt. *hánti: ávadhít*; with *ζώννυμι* cf. OLith. *júosmi*; and with *ἵστημι* cf. OLith. *stówmī*.

²Survey of material based on W. Veitch, *Greek Verbs, Irregular and Defective*, new ed., Oxford, 1887. The additional athematic verbs recorded in the Greek dialects afford no help in the present connexion.

to *φημί*, *λέγω*, etc.; Ved. aorist *avocat*, perf. *uvā'ca* as suppletive³ to *brāvīmi*), *ῥαμι* 'know', *κέμαι* 'lie' (Ved. *śēte*, *śáyate*, but aorists *aśayīṣta*, *śéšan*, epic *aśīṣayat*), *κρέμαι* 'hang', *στεύμαι* 'pledge'. Present and perfect alone are recorded for *ἴλημι* 'be propitious'; an aorist *ἐδίῃσα* to *δίῃμαι* 'seek' (beside *δίῃω* with present and imperfect only) is given simply by Hesychios; *πρίαμαι* 'buy' (cf. Ved. *krīṇīté* with lexicographical aorist *akreṣṭa*) appears only in the aorist, serving as suppletive to the present and imperfect of *ώνέομαι*; only *φημί* 'say' has both imperfect and aorist (*ἔφην*, *ἔφησα*) in good classical usage.

Seven GAv. forms occur: *ufyā* 'weave (songs), laud' (parallel with *stāumī*; cf. the YAv. sequence *staomi zbayemi ufyemi*), *kayā* 'desire' (cf. Ved. perf. *cākana*, aorist *akāniṣam*), *pərəsā* 'ask' (impf. *pərəsaṭ*, aor. mid. *frašī*; cf. Ved. *prcháti*, aor. *áprākṣīt*), *fraēšayā* 'set one's self in motion', *āstayā* 'place' (these two causatives), *spasyā* 'see' (parallel with *āmruyē* 'address'; also *hispa-*; cf. the suppletive Skt. *páśyati*: *adarśat*: *dadārśa* or *cakhyau*; Greek *ὄρῃμι* beside *ὄράω*: *εἶδον*: *ὄπωπα*; Alb. *shoh*: *paše* connected with Goth. *saihan* and Skt. *páśyati* respectively; OIr. *ad-clu*: *ad-con-dairc*; cf. also OLith. *vėizdmi* as contrasted with Lat. *video*), *zbayā* 'call upon' (beside *zaozomī*, impf. *zbayaṭ*; cf. Ved. *hváyāmi*, *juhū-māsi*: *áhvat*: *juhā'va*). From these it seems difficult to draw conclusions of value.

The three Albanian athematic verbs are all obviously durative; and *thom* (impf. *thoše*, aorist *thaše*), cognate with Ved. *śámsati* (aorist *śasta*), may be contrasted with the suppletions of Greek *λέγω* and Ved. *brāvīmi* noted above, and may be compared with Greek *φημί*: *ἔφην*: *ἔφησα*; while *kam*, with its suppletive aorist *patše*, is similar to Arm. *unim*: *kalay*.

In Teutonic, Anglo-Saxon and OSax. *dóm*, OHGerm. *tuom* (preterites *dyde*, *deda*, *tēta*), *stám* (*stēm*), *gâm* (*gēm*) are of interest here in that

³ For suppletion in verbs, in addition to H. Osthoff, *Vom Suppletivwesen der indogermanischen Sprachen* 7-15, Heidelberg, 1899, see L. Renou, *Grammaire sanscrite* 399-400, Paris, 1930; A. Meillet, *Esquisse d'une grammaire comparée de l'arménien classique* 101-2, Vienna, 1903, and *Le Slave commun* 246, Paris, 1924; Brugmann-Thumb, *Griechische Grammatik*⁴ 554, Munich, 1913; H. Hirt, *Handbuch der griechischen Laut- und Formenlehre*² 475-6, Heidelberg, 1912; G. Meyer, *Kurzgefasste albanesische Grammatik* 47, Leipzig, 1888; H. Pedersen, *Vergleichende Grammatik der keltischen Sprachen* 2. 271-2, 449, 453, 463-4, 473-4, 476, 489, 498, 545, 554, 558-9, 639, 642, Göttingen, 1909-13; R. Thurneysen, *Handbuch des Alt-Irischen* 443-8, Heidelberg, 1909; J. Vendryes, *Grammaire du vieil-irlandais* 181-3, Paris, 1908; R. Bethge, in F. Dieter, *Laut- und Formenlehre der altgermanischen Dialekte* 390-1, Leipzig, 1900 (also Dieter, *ib.* 456); for a list of athematic verbs in OLith. see F. Kurschat, *Grammatik der litauischen Sprache* 304-6, Halle, 1876; for Slavic Meillet, *Slave* 168-72, 246.

the cognates of the last in Goth. and Anglo-Saxon have the suppletive preterites *iddja* and *éode*,⁴ thus being comparable with Arm. *ert'am:čo-gay*; Greek *ἐρχομαι:ἦλθον*; OIr. *tiagu:luid:do-coid*; French *vais:allais*.

Excluding the copula, OCSlav. *jamŭ* and *damŭ*, as durative in aspect, may be compared respectively with the synonymous suppletive verbs Skt. *ātti:āghat*; Arm. *utem:keray*; Greek *ἐσθίω:ἐφαγον*; OIr. *ithid:do-id* (cf. also OLith. *ė'dmī*), and with Alb. *ap:daše*, OIr. *do-beir:do-rat* (with *-beir* cf. the suppletive Greek *φέρω:ἤνεγκα*; Lat. *ferō:tulī:lātum*, OIr. *berim:ro-uic*).

In Old Irish, the essential semantic difference between the absolute and the conjunct forms of the verb is that the former (of the athematic type) is imperfective, and the latter (of the thematic type) is completive in meaning,⁵ as *berim(m)* < **bheremi* 'I carry', but *do-biur* < **bherō* 'I carry until I carry it to = I bring', as *biur* 'I carry until I carry it out = I say'; *gaibit* 'takes':*congaib* 'contains', *fogaib* 'finds'. The type of *do-biur*, well defined by Pedersen as a 'praesens consuetudinale perfectum', thus corresponds exactly to the types of Greek *φείγω:διαφείγω, καταφείγω*; Lat. *taceo:conticeo*; Goth. *þahan:gaþahan*; Mod. Germ. *schreiten:überschreiten*; Eng. *look:overlook*; Lith. *lįpti:užlįpti*; OCSlav. *čuti:počuti*, where the aspect of the verb is a 'cursive perfective', i.e. 'completive' or terminative (e.g. Lat. *facio* 'I make':*conficio* 'I make till the making is complete = I finish').⁶

The facts that (i) athematic verbs, as well as their semantic equivalents elsewhere, seem peculiarly liable to suppletion by other verbs to furnish their aorists, and (ii) that OIr. distinguishes between the athematic form as imperfective and the thematic as completive (i.e. a division of perfective), appear to favour the hypothesis here advanced.

LOUIS H. GRAY

⁴ For the forms cf. Brugmann 2. 3. 102-3; Walde-Pokorny, VWIS 1. 827, 2. 603, 1. 588ff. The following list of suppletive verbs in Turfanian ('Tokharian A') may be of interest in the present connexion: present *āk*, 'journey, conduct', preterite *wā*; *i* 'go', *kālk*; *e* 'give', *wās*; *kāly* 'be', *stām*; *ken* 'call, name', *kāk*; *trāñk* 'say', *wen*; *nas* 'be', imperfect *še*, preterite *tāk*; present *pār* 'carry, bring', preterite *kām*; *ya* (*ypa*) 'make', *yām*; *yok* 'drink', *tsuk*; *lāk* 'see', *pāl*; *šwā* 'eat', *tāp*; *sām* 'be, sit', *lām* (W. Schulze, E. Sieg, and W. Siegling, *Tokharische Grammatik* 422, 423, 424, 432, 433-4, 441-2, 444, 448-9, 457-8, 460-1, 463-4, 475-6, Göttingen, 1931).

⁵ Cf. Thurneysen 321-2; Pedersen 2. 263-4.

⁶ For perfectivation see Brugmann 2. 3. 81-2; Brugmann-Thumb 548-50; D. Barbelenet, *De l'aspect verbal en latin ancien passim*, Paris, 1913; A. Leskien, *Litauisches Lesebuch* 188-9, Heidelberg, 1919; Meillet, *Slave* 248-51. For the term 'completive' for this type I am indebted to my pupil Mr. William S. Smith.

AVESTAN *vyānāy-*, *vyānā-*, *vyāne*

Bartholomae¹ lists as unconnected items and as of unknown, or uncertain, etymology Avestan *vyānāy-*, *vyānā-*, *vyāne*, all three of which are, I believe, derived from the Avestan root *an-* 'breathe', compounded with *vī-*, which prefix is used in Indo-Iranian to express, among other things, deliberation, thoroughness, intensification.² Both the simple root *an-* and the compound *vyān-* appear in Sanskrit, the latter meaning 'inhale and exhale'.³ Bartholomae lists *an-* 'breathe', but does not recognize *vī-* as one of its prefixes.⁴ I propose to set up an Avestan compound *vyān-* 'breathe attentively, deliberately, pervasively', and to show that the three words in question are formal and semantic derivatives of that root.

The first stem, *vyānāy-*, seems to be the strong form of a derivative made by adding to the compounded root *vyān-* the formative suffix *-i-*, with the *vrddhi* strengthening of the root found in Sanskrit primary derivatives.⁵ This type of formation is common in Sanskrit feminine abstracts expressing action,⁶ and, on the analogy of Sanskrit, *vyānāy-* must mean 'the act of breathing attentively, deliberately, pervasively'. According to Bartholomae, only one form of this stem, viz., *vyānīš*, occurs in Avestan, and that is in a fragment edited by Darmesteter.⁷ Darmesteter connects the fragment with a preceding one, and thinks that both bear on the ceremony of gathering the Barsom twigs. The text reads⁸: *vīspaēča antarə ašəm upa hauštuayā, fraorəṭ frašni avi manō zrazdātōiṭ aṇuhyat hača. vīspā antarə vyānīš*. Darmesteter translates this⁹: 'Dans l'intervalle rien que belles réitations de l'Ašem vohū, faites d'une conviction fervente, d'une âme dévouée. Et ne faire que regarder dans l'intervalle.' The verb *regarder* was suggested to Darmesteter by the Pahlavi gloss, and it seems to express concentrated attention. I would translate the noun *vyānīš* by 'attentive breathing', which agrees with the suggested etymology and does not alter the sense of the text. For the association of attention and breath-

¹ Chr. Bartholomae, *Altiranisches Wörterbuch* 1478 (Strassburg, 1904).

² AiW 1435; M. Monier-Williams, *Sanskrit-English Dictionary* 949c (Oxford, 1899).

³ MW 1031b.

⁴ AiW 112.

⁵ W. D. Whitney, *Sanskrit Grammar* §1143a (Cambridge, Mass., 1923).

⁶ WSG §1155.1a.

⁷ J. Darmesteter, *Le Zend Avesta* (Paris, 1893).

⁸ Transliterated as in AiW.

⁹ op. cit. 3. 66.

ing, compare the English expression 'breathless attention', which, allowing for the exaggerated form, is the exact semantic equivalent of the Avestan word.

The second stem, *vyānā-*, is glossed by Bartholomae 'Gescheitheit, Weisheit'. He derives it from *vī-* plus **yānā-* from *yā-*, adding that both meaning and etymology are uncertain. The word seems to be quite obviously a primary derivative of *vyan-*, similar in formation to *vyānay-*, with the suffix *-ā-* instead of *-i-*. Again, on the analogy of Sanskrit,¹⁰ I take this, also, to be a feminine action-noun. To support the suggested etymology, as well as the meaning assigned to it by Bartholomae, it is only necessary to recall the similar semantic extension of Latin *animus* 'intellect, reason, purpose'. As in the case of *vyānay-*, the prefix is merely intensive. The occurrences, both instrumental singular, are in *Yasnas* 29.6 and 44.7. The first passage reads: *aṭ ē vaočaṭ ahurō mazdā vīdvā vafūš vyānayā*, translated by Bartholomae¹¹: 'Da sprach er selbst, Ahura Mazdāh, der die Satzungen kennt mit Weisheit.' The other passage reads: *kē uzēmēm čōraṭ vyānayā puθrēm piθrē*, translated by Bartholomae: 'Wer machte mit Weisheit den Sohn ehrerbietig gegen den Vater?' On the analogy of Latin *animus*, the proposed etymology seems to harmonize with Bartholomae's rendering of both passages.

The last word, *vyāne*, Bartholomae takes¹² as an infinitive, deriving it from *yam-* plus *vī-*, and glossing it as 'auszubreiten', but it seems to be merely the dative singular of a root-noun, *vyan-*, with strengthening comparable to that seen in Sanskrit *vāc-* from root *vac-*.¹³ The form occurs in *Yašt* 10.64. The text reads: *miθrēm vouru.gaoyaoitīm . . . jāyaurvāñhēm yahmi vyāne daēnayāi srīrayāi pārəθu.frākayāi maza amava niḍātəm*. Bartholomae translates it thus¹⁴: 'Miθra (verehren wir, der) weite Fluren besitzt . . . wachsam; in den machtvollen Erhabenheit zur Ausbreitung der schönen Religion, der weithin sich verbreitenden, niederlegt.' I suggest translating *vyāne* as 'for the inspiration', literally, 'for the pervasive breathing'; cf. German *durchatmen* 'to pervade'.

To conclude, then: by setting up an Avestan compounded root *vyan-* 'breathe deliberately, attentively, pervasively', it is possible to estab-

¹⁰ WSG §1149.

¹¹ AiW 1478, 1346.

¹² AiW 413.

¹³ WSG §§383.1b, 391.

¹⁴ According to Fritz Wolff, *Avesta*. . . übersetzt 208 (Berlin, 1924).

lish *vyānay-*, *vyānā-*, and *vyāne* as its derivatives, and to assign to them the meanings 'attentive breathing', 'intellect', and 'inspiration' respectively, without doing violence either to normal semantic development or to textual interpretation.

MARIA WILKINS SMITH

A NOTE ON THE GOTHIC BIBLE, i COR. xiii 2

In the Gothic translation of the Bible, at i Cor. xiii 2, we find . . . *swaswe fairgunja miþsatjau* . . . translating the Greek . . . ὥστε ὅρη μεθιστάνειν . . . (in the English version ' . . . so that I could remove mountains. . .'). 'I wish to call attention to the word *miþsatjau* of the Gothic. One is struck by the inexactitude of the translation.

Μεθ-ιστάνειν means 'to move from one place to another', or at least 'to remove', 'to move away'.

Miþ-satjan should mean 'to place with' or 'beside', almost the reverse of the meaning of the Greek word.

Streitberg, in his *Gotische Bibel*, part two, vocabulary, passes over the point without remark, simply giving 'versetzen' as the meaning. But in a footnote on page 267 of the Text he admits the peculiarity of the form: '*miþsatjan* für *μεθιστάναι* nur hier. Sonst wird das gr. Verb durch *afsatjan* L 16,4 und *atniman* C 1,13 gegeben.' But no explanation is suggested.

Ferd. Wrede, in the 12th edition of Stamm-Heyne's *Ulfilas*, Paderborn 1913, does not treat *miþ-* as a prefix, and reads *miþ satjau*, but still the anomaly remains, intensified if anything, and there is no comment.

Now in the course of a detailed investigation¹ of the correspondence of the prepositional prefixes in verbs in the Greek and the Gothic texts of the Bible, I have uncovered the fact that the prefix *miþ-* in verbal forms occurs in the Gothic text a total of 61 times. Of these 61 occurrences, 58 stand opposite *συν-* in the Greek, and two do not correspond to any Greek prefix at all.² Once only, in the instance now under discussion, *miþ-* stands for *μετα-*. The inference to be drawn is that the meaning of *miþ-*, unlike that of certain other prefixes, notably *ga-*, has in no wise become attenuated or diversified, but has always, except in this instance, its full basic force of 'with'.

As an explanation of the passage I offer the following: The translator

¹ Rice, *Gothic Prepositional Compounds*, Language Dissertation pub. by the Linguistic Society of America, No. XI, 1932.

² Ibid. 108 f., *miþ-niman* = *δέχεσθαι* Mt 11.14 and *miþ-skalkinon* = *δουλεύειν* Ph 2.22.

was the victim of a momentary lapse, and, betrayed by the sound of the Greek prefix in the form $\mu\epsilon\theta$ - which stood in the original text, he erroneously supplied $mi\beta$ - in his translation in place of the more or less accurate af - of Luke 16. 4. The respective sounds represented by $mi\beta$ - and $\mu\epsilon\theta$ - are closer than might at first seem, for the Greek ϵ was close,³ the Gothic i was open,⁴ and by this time (4th century A.D.) θ was a spirant and equal to β .⁵

ALLAN LAKE RICE

³ E. H. Sturtevant, *The Pronunciation of Greek and Latin* 181, Chicago 1920.

⁴ Wright, *Grammar of the Gothic Language* 7, Oxford 1924.

⁵ Sturtevant, *Pronunciation of Greek and Latin* 128.

BOOK REVIEWS

Selected Studies of the Principle of Relative Frequency in Language.
By GEORGE KINGSLEY ZIPF. Harvard University Press, 1932.

‘Ein grosser Aufwand, schmähhlich! ist vertan.’

—Goethe's *Faust* 11837.

Some three years ago I received the author's doctoral dissertation, ‘Relative Frequency as a Determinant of Phonetic Change’. I confess that I hailed it with delight, for the problem seemed well worth investigating. My hopes vanished after I had read a few paragraphs, and I perused the 95 pages of the book with growing reluctance. It displays, almost with some pride, crude ignorance of phonetics and utter indifference to method and logic; its results are worthless. In spite of all, I felt a certain liking for its author: A very young, courageous enthusiast (so I thought in my optimism), misled by the apparent consistency with which his preconceived notion seemed to work out. That rare type deserves encouragement or, at least, should not be discouraged; in a few years he may understand and correct the failure of his first attempt. Let us hope the best for his next venture!

The ‘next venture’ has appeared. It is a rather pretentious book, prepared and printed with what must have been an extremely generous subvention from an educational foundation.¹ It contains 24 pages of text, 2 pages of logarithmic charts, 21 pages of word lists, and 63 pages of tabulations of Chinese syllables and sounds, compiled with the aid of a considerable staff.

The text begins with a summary of the author's dissertation that is worthy of a Bourbon—nothing learned and nothing forgotten. In spite of several judicious reviews he does not see any flaws in his reasoning, but reiterates, with slight comment, his statistical observations. Roughly speaking, this is his contention: In Indo-European languages and in Hungarian the ‘tenues’ are more frequent than the ‘mediae’ because they are less conspicuous. This sentence (3) is a fair specimen of

¹ The New York Times of January 21 reports a grant to Zipf from the same source for research on ‘African Languages and the Principle of Relative Frequency’.

his reasoning: 'Having become more frequent than *p*, as our table shows, the German and Scandinavian *b* have weakened in both their increment of voice and explosiveness, and have become a sound not very different from a softly voiced English *p*.' As it stands, this sentence (as well as the rest of the book) is sheer nonsense, aggravated by the fact that neither 'German' nor 'Scandinavian' (the table refers to 'Swedish') are phonetic concepts in the sense of this problem, since within either group the consonant articulations show the widest variations. By a thoroughly objectionable tabulation, based on such phonetic nonsense, the author compares the consonants of the Peking dialect with his former findings. His statistics (5) show that the Chinese sounds transcribed by *b d g* are far more frequent than those transcribed by *p t k* (in Zipf's terms, 'lenis media' against 'tenuis fortis aspirata'); the average ratio is nearly 3 to 1, much higher than the inverse ratio of the former tabulation. So Chinese would seem to disagree with the languages treated in the dissertation. However, undismayed, Zipf tells us that the Chinese figures are really 'an answer to every criticism made of this portion of the theory'. It is all a question of 'conspicuousness': aspirated *p t k* are more conspicuous than 'lenis media' (voiceless lenis is meant) *b d g*. Isolated, this assertion could be remodeled sufficiently to contain a kernel of truth. In its setting, it is a glaring exhibition of phonetic crudeness. For instance: referring to Elise Richter's excellent review, the author admits that German *b* 'would be more apt to lose its voice in *gebst* (*sic*) or *hebst* than in *geben* or *heben*'. But *b* it remains for his statistical purposes. Evidently, he does not know that the difference between Pekingese *p t k* and *b d g* (as described by him) is essentially the same as in Danish (as far as *b d g* have remained stops there), nearly the same as in Standard German as spoken by Middle and South Germans, and fairly similar to the conditions in High German dialects. He does not realize that phonetic facts such as these, and not the accidents of German or 'Scandinavian' spelling, must be compared with Chinese phonetic transcriptions. If there is anything acceptable in the book it is the very fact that the author's new statistics do not confirm but refute the superficial generalizations of his dissertation.

The second part, entitled 'Relative Frequency, Abbreviation, and Semantic Change' is a disorderly rambling over unrelated linguistic and pseudo-psychological notions, from Johannes (*sic*) Schmidt's Wellentheorie to Freudian principles (p. 19), 'many happy discussions' of which have been helpful to Zipf 'in revamping and expressing the principle of relative frequency, though it has often been impossible to reconcile

some of the more speculative theories of the *Gestalt* with the facts of the language'.

The text concludes with the promise that the author will make future use of the frequency lists of Chinese syllables and tones 'in attempting to show that the degree of inflection of a language is possible of rough computation' (*sic*); and adds semi-melancholically: 'It is with true regret that my space now necessitates conclusion (*sic*), without my even broaching the question of language as a perception.' What a pity! But he is not really sad. He does know his own worth. For on the same page he says: 'The astonishing thing about this marked tendency is not that it is new—for it is well-known among linguists and as self-evident as gravitation. The astonishing thing is that it should occur to anyone to build up a law of language and mind upon it.' * * *

The laborious counting of words in Plautus and the comparison of their relative frequency with American newspaper English and Peking Chinese vocabularies is quite as absurd in method as the first part of the book, and the Chinese frequency tables are utterly useless. In the first part, the author clearly proves that he is wrong; in all parts, that he cannot think scientifically.

But another factor is even more serious than these scientific, logical, and stylistic short-comings. The author refers in several places to the courteous but firm reviews by Eduard Hermann and Elise Richter and claims that they are, at least partly, in his favor. A few passages may illustrate this complacent view. On page 1 he attributes by implication to E. Hermann the remark that an oriental language 'would offer valuable and final evidence'. Hermann's real statement is this: 'Über Häufigkeit der verschiedenen Laute lässt sich erst reden, wenn wir aus möglichst gleichartigem Material Angaben aus den wirklich ganz verschiedenen lebenden Sprachen besitzen, aus den Indianersprachen Amerikas, den Sprachen des fernen Ostens, den Sprachen Afrikas usw.' Here Zipf's reference is merely inaccurate. But it is difficult to apply so moderate a term when he claims (5) that Hermann 'expresses his surprise that the tenuis should be generally more frequent than their corresponding mediae, and wonders at the reason', while Hermann actually says: 'Die Sammlung des Verf. ist also ungeeignet und völlig unzulänglich', and continues (I paraphrase for the benefit of the author who evidently did not understand the German sentence): 'For the time being we do not know whether the tenuis is more frequent than the voiced lenis only in Indo-European and Hungarian, or also in other languages.' Not a trace of 'surprise' or 'wonder'. Zipf reaches the

climax of his unfair treatment of Hermann's review in asserting that Hermann 'did, after all, concede that the theoretical side of the argument appeared incontestable'. Here are Hermann's words: 'Obwohl die geschickte Beweisführung (?) [question mark mine] die neue Hypothese unanfechtbar zu machen *scheint* [italics mine], bin ich nicht nur nicht überzeugt worden, sondern ich muss sogar gestehen, dass ich die Ansicht des Verf. für *unbedingt unrichtig* [italics mine] halten muss.'

I am offering this review to *LANGUAGE* with considerable hesitation. An adequate review would consist in the two words 'utterly worthless', and to say more seems waste of space. But there is more involved than the mistake of a young enthusiast without phonetic and methodical training. The censure should be directed not so much against him as against those (whoever they may be) who should have performed the duty of advising the Harvard University Press against accepting this book for publication. Zipf's book constitutes a disgrace to American scholarship about as bad as a certain volume on Germanic laws and Wulfila's Gothic that was published by the same press a number of years ago. Censorship of scholarly production should not be tolerated, but there is a vast difference between that and an earnest protest against inexcusable levity of the kind exhibited in this matter by the Harvard University Press.

E. PROKOSCH

Grammaire du Vieux-Perse. Pp. xxiv + 266. By A. MEILLET. Second edition, revised and enlarged by E. BENVENISTE. Paris: Ed. Champion, 1931.

The first edition of this important work has been out of print for several years, and with the acquisition of fresh linguistic material by the French excavations at Susa (V. Scheil, *Les Inscriptions des Achéménides à Suse*, 1929; F. W. König, *Der Burgbau zu Susa*, Leipzig, 1930; R. G. Kent, *The Recently Published Old Persian Inscriptions*, Philadelphia, 1931; E. Herzfeld, *Arch. Mitt. aus Iran* 3. 29-124, Berlin, 1931; W. Brandenstein, *Die neuen Achämenideninschriften*, *WZfKdM* 39. 7-97, 1932), a new edition was much to be desired. This we now have from the competent hands of Benveniste, Meillet's brilliant young colleague at the *École des Hautes-Études*.

Benveniste has utilized not only the new material in the Susian and other inscriptions published since 1915, the date of the first edition, but he has included the Iranian material found in transcription in the Aramaic documents of Elephantine, and has enriched the volume with

numerous parallels from Middle and Modern Persian. He has retained and amplified the minutiae on the syllabary and the possible variations in the normalizing; he has added new examples in the phonology and elsewhere. He has rewritten much of the Introduction (§1-§61), and has made much progress in identifying the Median elements in the language (§8-§13, etc.). He has kept the paragraph numbering throughout, except that the old 387-8-9 are combined into the new 387, to give place for a new §388 on prepositions and postpositions, and a new §389 on adverbs.

He has made one change in the transcription, that of indicating Meillet's ζ (Tolman's θ ; Weissbach's s with r above it) by ss with a ligature sign beneath it. This is a needless change, and merely adds difficulties for compositor and scholar alike. Why cannot Iranian scholars unite on one method of transcription of Old Persian? Personally I agree with Meillet's system, as seen in his normalized text, except that I would omit the useless diacritics from \check{c} and \check{j} , and I shall so quote the OP words in this review. On the other hand, there are two possible ways of citing the un-normalized text: either (1) with the inherent vowels printed in the line or raised, as in *a-ku-u-na-va-m* or *ak^uun^vm^a*, for *akunavam*, or (2) with omission of the inherent *a*, but representation of inherent *i* and *u* by raised letters, as in *ak^uun^vm*. This last is Meillet-Benveniste's system, which I shall employ in the present review.

In the following running commentary I shall normally refer by paragraph numbers, since these give reference to both editions. §3 discusses the new inscription of Ariaramnes, as well as the brief one long known which contains the name of Cyrus, and their evidence on whether Old Persian was written before the time of Darius the Great. But the addendum (261) gives Schaefer's judgment that the inscription of Ariaramnes is a forgery, though an ancient one; and there remains no positive evidence that Old Persian was reduced to writing before Darius's reign. §16 again asserts that the Achaemenid kings were not Zoroastrians, although their deity bore the name Ahuramazda. In §59, Benveniste adds among the errors of writing the passage Bh. 5. 11 *utā daiy marda*, where he assumes the omission of the augment in **amarda*; but an interpretation as a noun, 'to him (there was) a crushing victory' is now given by L. H. Gray, AJP 53. 69 (1932). In the same paragraph, the emendation of *harbānam* 'tongue' to *h(i)zbānam*, made by Meillet in the first edition, is omitted, and we find *h(i)d^ubānam* proposed §129; the sign *du* differs from *ra* only in having a prefixed angle, identical with the word-divider in the Bh. inscription, and therefore easily lost in the interior of words.

§76 treats the ideograms, and while the occurrence of a new ideogram for *baga-* 'god' is noted, the old statement is retained, that only the ideogram for 'king' is found in the inscriptions of Darius; but that for 'Ahu-ramazda' is found in Scheil's Nos. 7, 9, 11, that for 'earth' is found in Scheil's Nos. 1, 5, 6, that for 'province' is found in Scheil's Nos. 1, 3, 4, 9, 11, 16C—all inscriptions of Darius. Likewise, in §85, another inaccurate statement is retained, that the OP syllabic characters are composed of wedges and angles, either large or small, which may be placed either horizontally or perpendicularly to the line of writing; but the wedges have only one position, with the angle to the left.

§93 has a somewhat amplified treatment of Meillet's view that PIE *r* remained in OP; there are difficulties both with this view and with the other view that *r* became OP *ar* (or *ra*). Meillet's suggestion that *-štr-* became OP *-š-* (§109, cf. §108) is retained, with added comment. The writing of the *m* in *hmtxštiy* = *hamtaxšataiy*, where it stands before a stop, may be due to the fact that it was not assimilated in position to that stop, but remained allorganic. In §143, on anaptyxis, the writing *sugdm* = *Sugdām* in the Hamadan inscription of Darius is overlooked. In §146 (both editions), I cannot subscribe to the view that *tya-* retained its *t-* unchanged because the unaccented value of the word reduced it from **tiya-*: I have also some reserves about the same explanation for *fraharvam* (occurring but once, Bh. 1. 17!) as against the usual *haruwa-*. It is worth noting that the *θ* in *xšāyaθiya-* marks the word as Median, since *θy* normally became *šy* in OP (§147).

In §154 (both editions), the text of Dar. NRa 46 is misquoted as *d'ury hc[a] parsa* = *dūra(i)y hacā Pārsā*. According to Stolze's photographs, cited by Tolman in his *Ancient Persian Lexicon and Texts* 46 ftn. and 101, *dūrayapiy* precedes the gap. In NRa 12, the reading is *dūraiapiy*, without separation of the words. It is obvious that the former writing represents the product of sentence-sandhi, while the second resists it graphically; when the two words are separated by the divider, they are always *dūrai y apiy*.

In §184, Benveniste interprets *avākanam* Bh. 1. 86, as 'j'ai entassé', from a root *kan-* seen in NP *āwgāndān* 'entasser', homophone of but distinct from *kan-* 'dig'. In §199, the interpretation of *niyačārayam* might be revised in the light of J. R. Ware's article, JAOS 44. 285-7. In §254 (and §316), the interpretation of *rauta* Dar. Sz. c 9 as ablative is open to serious objection, since in no other of the naming phrases is there anything but a nominative of the class-word; for a neuter stem in *-tos*, cf. Latin *pectus*, *litus*. In the Palace Record,

line 45, we read *st^uuna aḡginiy* = *stūnā aḡa^ugainiya*, an obvious nominative plural (despite the verb *abariy*, which must be doing plural duty), for there were certainly more 'stone columns' than one used in the Palace. The plural value of *stūnā* is cited in §267 and §307, but the adjective is not quoted as a plural of an *i*-stem in §308, and both words are cited together as singulars in §264. The nom.-acc. *apadānam* is now quotable from the recently published inscription of Atraxerxes II found at Hamadan, and should replace the previously known *apadāna*, which is an imperfect writing, in §267.

There is much new material on the suffix *-ka-*, §273; but citation of *nyāka* is questionable, for only *-km* = [*nyā*]kam, acc., remains on the stone (*apanyaka-ma* 'my grandfather's great-grandfather' is legible entire and is cited in the same section). The justification of perhaps *kāsika* (§273) for apparent *kask* = *kāsaka* is in Elam. *ka-si-ka*; but I fail to locate it, since the word is not given in the index (253-60). The Aramaic borrowing *zrnyk* = *zarniyaka* is glossed 'orpiment' §273, but 'arsenic' §261; consistency is desirable.

The alleged *hidav* = *Hi^udāva*, Pal. Record 44, which is cited §284 as an abl. of a *u*-stem, may be read with more probability *hiduv* = *Hi^udauw*; see my Recently Publ. OP Insc. 209 (in JAOS 51), and cf. *hacā Bābirauw*, line 33 of the same inscription. In the same connection it may be remarked that the normalized *dahyuvā*, given as loc. in §287, should rather be *dahyauvā*, identical with the endings just given except for the postpositive *-ā*. In §308, *arašniš* is cited as nom. sing. of an *i*-stem; in §318, as nom. sing. of an *i*-stem; in §358 end, as an acc. plural, which is correct. In §325, the doubts about the *-ša* in *avadaša* and *dūradaša* seem to me unduly stressed; the *-ša* can be the pronominal ablative attached to give an ablatival significance to the locative adverb. In §326, Benveniste takes definite stand that *ahyāyā*, with or without *būmiyā*, is always locative. On *hacā daršam* Bh. 1. 50 and *ufraštādiy* Bh. 4. 69, I stand by my previous views, JAOS 35. 336-43 and 351-2 and again in JAOS 51. 202 and 229, despite §345 end: and that the defective *di[š]* in NRa 21 has the value of a dative or an ablative (§345 end), also seems to me unlikely, cf. JAOS 35. 347 ftn. But the interpretation of *tyanā manā dātā*, Bh. 1. 23, in §369, after Weissbach, is certainly correct, and I wish to revise my interpretation, JAOS 51. 208 ftn., accordingly.

I cannot accept Benveniste's view on the origin of the instr. *raucabiš* with nominative numerals (§370), since I consider *ḡakatā* certainly a nom. pl. neut. and not an instrumental sing. The formulation that the locative has the postposition *-ā* in the plural always, and in all common

nouns in the singular (§371), is inexact, if semi-adverbs like *ašnaiy* and *nipadiy* are included under the rubric locative. In §417, Tolman's interpretation of *yanaiy* is given as 'là', but it is 'whereon'.

Here and there I note new interpretations, among them the following: *frāsaḥy* Pal. Record 27 (§113), short vowel sigmatic aorist of *sā-* = Av. *spā-* 'jeter, entasser'; *amuⁿθa* (§187), taken with Jackson, JAOS 38. 112, as cognate with Skt. *munṭh-* 'flee'; *xšayārša-* (§290), analyzed into *xšaya-* and *arša-* 'just'; *ustašnām* (§294), not *uštašanām*, as usually normalized; *āšnaiy* 'en paix' (§389), cf. BSL 31. 67-9; *duvitāparnam* 'à la suite, successivement' (§389), after the Elamite; *aurā* Dar. Pers. e 22 'ici-bas' (§389), cf. BSL 30. 70-3; *hyāparam* 'de nouveau' (§389), from neut. *hya* + *aparam*.

Finally, a few misprints, cited by page and line: 58.4, for §388, read §389; 64.26, for *hmiçy* read *hmiçiy*; 87.15 for *Δραγγιάνη* and 87.22 ('75.6) *Σογδιάνη*, read *-ανή*; 169.30, for *nštn*, read *nywštn* (as at 157.16); 192.3, for §390, read §389; 211.30 and 212.1, the line references to Dar. Ham. should be respectively 5-6 and 4; 227.32, for art., read Art.

ROLAND G. KENT

La Catégorie du duel dans les langues indo-européennes et chamito-sémitiques (Extrait des mémoires publiés par l'académie royale de Belgique, classe des lettres, etc., 2 series, 28). Pp. 67. By A. CUNY. Brussels: M. Hayez, 1930.

Already distinguished for his *Nombre duel en grec* and his *Études prégrammaticales sur le domaine des langues indo-européennes et chamito-sémitiques* (Paris, 1906, 1924), M. Cuny here seeks to trace a genetic relationship between the formations of the dual in Indo-European and Hamito-Semitic. In principle, I am in entire sympathy with endeavours to link Indo-European with groups now currently held to be unrelated to it; and I believe that the investigation both of it and of Semitic (including Hamitic), as well as of Finno-Ugric, has now reached a stage where their possible relations should be seriously investigated.¹ The only sound bases for proof of kinship are, it seems self-evident, phonology first, morphology second; and the only safe method would appear to be exact study of each group separately in rigid isolation; reduction of each and every sound or form to its Proto-Indo-European or Proto-Semitic hypothetical original; and only then any attempt at comparison of the two. To my very real regret, however, I am as yet un-

¹ Cf. H. Pedersen, *Linguistic Science in the Nineteenth Century* 335-8, Cambridge, Mass., 1931.

able to feel that any of the evidence thus far adduced in support of an earlier Indo-European-Hamito-Semitic unity is scientifically convincing; and I am still compelled to remain, in respect to this problem, in the unhappy position of a sceptic who would fain believe, but cannot.

In the first place, M. Cuny holds (7, 34, 42) that the direct (nominative) dual ended in $-ā(-na^x)$ and the oblique (genitive-accusative in $-ai(-na^x)$ in P-S, and in $-ā^x-w$, $-w-a^xi$ in H-S; but from the parallelism of the type of Arabic

	Sing.	Dual	Plur.
Nominative	<i>sāriqū⁽ⁿ⁾</i>	<i>!sāriqā(nī)</i>	<i>sāriqū(na)</i>
Genitive	<i>sāriqī⁽ⁿ⁾</i>	<i>sāriqai(nī)</i>	<i>sāriqī(na)</i>
Accusative	<i>sāriqa⁽ⁿ⁾</i>	<i>!sāriqai(nī)</i>	<i>!sāriqī(na)</i>

it would appear that the P-S forms of the dual ended in $-a-u(nī)$, $-a-i(nī)$, and $-a-a(nī)$ respectively.² At most, the *w* (found only in OEgypt.)³ here suggests comparison with I-E *u* as a sign of the dual in the types of $-ō/ē(u)$, (nom.), $-oi-o/e-u-s$ (gen.), $-oi-o/e-u-s-u/i$ (loc.), preserved, e.g., in Ved. *devā'(u)*, *padós*, Av. *zastayō*, Arcad. *Διδυμοινν*; but, on the other hand, the P-S nom. endings $-u-$, $-au-$ (if this reconstruction be right), $-ū-$ for sing., dual., and plur., when compared with OEgypt.-0, $-uī$, $-u$ (e.g. *m-š-d-r* 'ear', *m-š-d-r-w-y* 'two ears', *m-š-d-r-w* '[more than two] ears'), would seem to indicate that the H-S ending $-u-$ marked the nom., not the dual.⁴

As regards the verb, M. Cuny (40 and note 3, 55, 62) finds but one identity: the second person of the 'telic' ('perfect') in the types of OEgypt. *š-d-m-t-n-y* 'ye two have heard', Arab. *katabtumā* 'ye two have

² Cf. my forthcoming Introduction to Semitic Comparative Linguistics §§204-5: 'In the dual the primitive nom. seems to have disappeared, and to have been replaced in Acc. and Arab. by the acc., while the other dialects, including Modern Arab., have extended the gen. to include the old nom. and acc. In the plur. Acc. and Classical Arab. have retained the nom., but have made the gen. a general oblique plur. case; Eth. employs the acc. as the general plur.; Heb., Aram., and Modern Arab. make the P-S gen. do duty for all three original cases'. The cases marked ! would thus seem to have been transferred from their original places.

³ For M. Cuny's reconstruction of the I-E dual see *Catégorie* 41-8, 66; for my own, *LANG.* 8. 197 (1932).

⁴ M. Cuny's $-w-a^xi$ for the oblique dual is purely theoretical, no instance of that case being found in OEgypt. The fem. dual Arab. type of *ḥamrawāni* 'red' (masc. sing. *'aḥmaru*, dual *'aḥmarāni*, epicene 'broken plural' *ḥumru*) does not really have a dual infix *u*, as he supposes (23, 34), but is formed normally on the fem. sing. termination $-ā'u$ (sing. *ḥamrā'u*), and its 'sound plural' would be **ḥamrawā-tu*; see W. Wright, *Grammar of the Arabic Language* 1. 188, 194, 197, 238, Cambridge, 1896. It is scarcely certain that the type of Hom. *ποδοί(ι)ν* must be explained from **podoi-y-i*, as M. Cuny thinks (47, 60-1, cf. *Duel* 36-7, and contrast my suggestion in *LANGUAGE* 8. 196).

written' as compared with the I-E secondary active ending *-to-m* as seen in Ved. *ā's-tam*, Greek *ἤσ-τον*. This coincidence seems merely fortuitous. Arab. *katabtumā* (no other Sem. language shows the dual in the verb) is, in all probability, a late formation on the plur. by the addition of *ā* (plur. masc. *katabtum[u]*, Acc. *katbātunū*), and *katabtum[u]* is itself a noun of action plus the pronoun of the 2 plur. masc. (Arab. *'antum[u]*, Acc. *attunu*, P-S **'an-t-um-ā*), just as OEgypt. *š-d-m-t-n-y* contains the suffixed pronoun *-t-n-y* (22, 30-1). In I-E, on the contrary, there is no trace whatever of a pronoun of either the 2 dual or the 2 plur. characterised by a dental of any sort.⁵ Another objection, equally serious, lies in the difference between the aspects of the 'tenses' concerned: the Sem. 'telic' and 'atelic' correspond, generally speaking, to the Lat. distinction between 'perfectum' (perfect, pluperfect, future perfect) and 'infectum' (present, imperfect, future) respectively,⁶ so that the Arab. 'telic' ('perfectum'), characterized by *-tum(u)* (plur.), *-tumā* (dual), is exactly opposite in aspect to the I-E 'infectum' ('atelic') characterised by *-to-m*.

Not only does there seem to be no reason to suppose (43, 53) that H-S may have known, besides the dual and plural, a trial, and possibly even a quadrial, number;⁷ but doubt may actually be expressed as to whether these two alleged numbers ever really existed. The 'trial number' is known to me only from the Melanesian linguistic area. When it is examined, however, it is found to be merely the plur. plus the word for 'three', e.g. Ambrym (Central New Hebrides) *ni* 'I, er-ro 'we two' (inclusive; cf. *ru* 'two'), *cenem-ro* (exclusive), *er-sul* 'we three' (inclusive; cf. *sul* 'three'), *cenem-sul* (exclusive), plurals *er(-con)*, *cenem*. The 'quadrial', apparently found solely in the Marshall Islands (Micronesia), is equally derivative, e.g. *na* 'I, *kij-ro* 'we two', *kij-il* 'we three', *kij-ea* 'we four', *kij(uij)* 'we (more than four)' (cf. *ruo*, *jilu*, *emen* as the numerals for 'two, three, four').⁸

LOUIS H. GRAY

⁵ For the Sem. phenomena here discussed cf. Gray, Introduction §§225-6, 239, 362, 372, 375; for the I-E, his study in *LANGUAGE* 6. 243-4, 245 (1930). Similarly, the type of the Arab. 'atelic' ('imperfect') *taktubāni*, like the 3 dual *yaktubāni*, is obviously constructed on the analogy of the dual of the noun.

⁶ M. Cohen, *Le Système verbal sémitique et l'expression du temps* 10-28, Paris, 1924; A. Meillet, *Esquisse d'une histoire de la langue latine* 20-3, Paris, 1931; Gray, Introduction §359.

⁷ It seems most dubious to explain (45) *-i-* stems as 'd'anciens singulatifs de triels' or *-u-* stems as 'd'anciens singulatifs de duels' (contrast Gray, in *BSLP* 31. 34-42 [1931]).

⁸ See R. H. Codrington, *Melanesian Language* 111-2, 265, 267, 312-3, 324, 333, 339, 346, 355, 369-70, 379, 385, 433, 451, 489, 495, 500-1, 526, 556, Oxford, 1885; S. H. Ray, *Comparative Study of the Melanesian Island Languages* 148-9, 317, 319,

Simplified Czechoslovak Grammar and Conversation Book. Pp. 320.
By O. ŠTĚPÁNEK. Omaha: The Czech Historical Society of Nebraska,
1930.

There has long been a need for a practical and elementary grammar of the Czech language for the use of Americans and for the children of Czech parents who have more or less fully forgotten their native language. Štěpánek has endeavored to fill this gap and he has produced a very successful book which should be of real value. In this he has incorporated some interesting ideas as to arrangement by a liberal use of cross references in each lesson and by indicating in the vocabulary the page on which the word is first used in the course of the volume. The first impression is unusual, but it may well be justified in practice.

The volume is arranged with special attention to popular use, and there is an evident desire to avoid scientific and technical language in many cases; but this can be only of advantage to the average student for whom the book is intended.

Then we have also a rapid survey of the differences between Czech and Slovak and a very interesting series of common phrases in the two forms that illustrate well the similarities and differences between the two. There are reading lessons and fairly sufficient vocabularies for the beginner. In addition to this Štěpánek has also made a beginning of the analysis of the changes in Czech spoken in Czechoslovakia and the United States. He tries to give examples of the adjectival declension in use in Nebraska; and scattered throughout the volume are many notes on words and phrases, and on the influence of English and other foreign languages.

The volume endeavors to cover too much ground. That is very evident, but its defects on this score are less than its assets. We are in serious need of a new elementary Czech grammar and of studies on the language in America. Štěpánek has met the first need and he has started on the second. Let us hope that he may some time bring all his material on this second problem together and produce a real study of the changes that life in the United States has produced on the tongue of a Slavonic colony. At the same time we can recommend the book for all elementary students of the Czech language who wish to start their studies with a volume in English.

CLARENCE A. MANNING

322, 335, 340, 386-7, 403, 593, Cambridge, 1926; A. Thalheimer, *Beitrag zur Kenntnis der Pronominalia personalia und possessiva der Sprachen Mikronesiens* 46, 49, 54, 74, Stuttgart, 1908; F. Müller, *Grundriss der Sprachwissenschaft* 2. 2. 72-4, 76, Vienna, 1882.

NOTES AND PERSONALIA

SCHOLARS INTERESTED IN HAMITIC AND SEMITIC STUDIES organized at Paris, in December 1931, a *Groupe linguistique d'Études chamito-sémitiques*. Meetings are held monthly from November to June, and the proceedings of the sessions are distributed to the members.

The *Groupe* counted thirty-one members in the academic year 1931-2, and now extends a general invitation to individual scholars, societies, and libraries, to assume membership. The dues for the academic year are twenty French francs, payable to the officers of the *Groupe*: Monsieur Marcel Cohen, 20 rue Joseph Bertrand, Viroflay (Seine-et-Oise); Monsieur Raymond Jestin, 5 rue Sophie Germain, Paris XIV. The Constitution, list of members, and a sample of the proceedings will be sent on request. Members residing at a distance from Paris may send communications in writing, for presentation at the sessions.

REV. GEORGE WILLIAM BROWN, professor of Missions in India and Instructor in Phonetics at the Kennedy School of Missions, Hartford Seminary Foundation, and a foundation member of the Linguistic Society of America, died at his home in West Hartford, Conn., on December 4, 1932, after a brief illness, which came upon him on November 30.

Dr. Brown was born in Harford County, Maryland, on October 25, 1870, received the degrees of A.B. and A.M. from Hiram College in 1897 and 1898, and the degree of Ph.D. from the Johns Hopkins University in 1910 for work done in Sanskrit, Hebrew, and Arabic. He taught at the now defunct Central Christian College, Albany, Missouri, 1897-98, and from 1898-1900 was Superintendent of Public Schools in Princeton, Missouri. In 1900 he went to India as a missionary of the Disciples of Christ, and remained there until 1917, except for the years of 1908-10 when he came to America on furlough to pursue graduate studies at Johns Hopkins. While in India he did educational work, and was Principal of the Christian Bible College, first located in Harda, then transferred to Jubbulpore. From 1917-21 he was Professor of Semitic Languages and Missions in the College of the Bible, Transylvania University, Lexington, Kentucky; from 1921-27 he was Dean

of the Faculty and Professor of Indology at the College of Missions, Indianapolis; from 1927 until his death he was at the Kennedy School of Missions.

His published scientific work was chiefly in the Upanishads, the Tulsi Das Rāmāyaṇa, the history of certain Indian religious ideas, and the possible relationship of the Dravidian languages with certain near-eastern languages. At the time of his death he had collected a large amount of material for formulating a Dravidian phonology. He was an expert in Hindi, and had been a member of the interdenominational committee for revising the Hindi translation of the Bible.

MISPRINTS, as every author knows, seem unavoidable. Apart from those easily corrected by the reader, and therefore not misleading, we have noted the following in recent publications of the Society:

Monograph No. 10: The Sounds of Latin, by R. G. Kent:

P. 24, line 3: for labial read labio-dental

P. 34, line 5: for camel read came

P. 45, line 2 of §29: for *meet* read *mate*

P. 72, line 3: for **stasis* read **statis*

P. 166, line 6 from bottom: insert VII.B after IV

Dissertation No. 11: Gothic Prep. Compounds, by A. L. Rice:

P. 7, line 9 from bottom: for part-by-translation read part-by-part translation

P. 22, line 4: for prefixing read affixing

P. 27, col. 2, line 9 fr. b.: omit asterisk.

P. 57, last line: for oc. read loc.

P. 123, line 21: for 4049 read 4047

Dissertation No. 12: Indo-European **deiwo-*, by G. S. Hopkins:

P. 47, line 2: for **Diyōis* read **Diyōs*

INFORMATION is desired of the present addresses of the following members of recent years, whose last recorded addresses are here given:

Mr. George Beecher, Albemarle Park, Asheville, N. C.

Miss E. D. Breeze, 2330 University Ave., New York City.

Frank Hawley, Esq., Norton-on-Tees, Durham, England.

Miss Lucy Hutchins, Blue Mountain, Mississippi.

Dr. E. J. Johns, Greenwich, Conn.

Mrs. Cecyle B. Lovejoy, Westchester School of Drama, White Plains, N. Y.

Miss Mabel H. Pollitt, Richmond, Ky.

Mr. A. R. Wheelock, Silver Bay on Lake George, New York.

NEW MEMBERS FOR 1932, subsequent to the last published list, and up to the end of 1932, are the following, whose addresses will be found in the List of Members printed in this issue of *Language*: Robert E. Dengler, Sigmund Feist, Mary C. Fitzpatrick, Daniel C. Fives, John P. McCormick, Anna Irene Miller, Olin H. Moore, F. W. Strothmann.

The following were received before January 6, 1933, as members for 1933:

Mr. Charles J. Donahue, 239 West Rock Ave., New Haven, Conn.
(Graduate Student in English, Yale Univ.)

Dr. Harry Hoiyer, Univ. of Chicago, Chicago, Ill. (Anthropology)

Mr. David B. Kaufman, Faculty Club, Lafayette College, Easton, Pa. (Latin)

Prof. Charles A. Knudson, Dept. of Romance Langs., Univ. of Michigan, Ann Arbor, Mich. (French)

Mr. Gerhard Laves, 5400 Greenwood Ave., Chicago, Ill. (Graduate Student in Anthropology, Univ. of Chicago.)

Prof. Albert P. Martin, Brown Univ., Providence, R. I. (Germanic Langs. and Lits.)

Mr. George A. Meyer, Nod Road, Clinton, Conn. (Romanics)

Dr. Stanley S. Newman, Institute of Human Relations, 250 Yale University, New Haven, Conn. (Research Assistant in Anthropology)

Dr. M. H. Roberts, 1632 Chapel St., New Haven, Conn. (German, Yale Univ.)

Mrs. Anita Lawrence Simpson, 96 Hillcrest Ave., Park Hill, Yonkers, N. Y. (Spanish and French, Sarah Lawrence College, Bronxville)

Prof. George Summey Jr., 261 F.E., College Station, Texas. (English, Agricultural and Mechanical College of Texas)

Dr. Harold Whitehall, Dept. of English, Univ. of Michigan, Ann Arbor, Mich. (Asst. Editor, Middle English Dictionary)

Prof. Leavitt O. Wright, Univ. of Oregon, Eugene, Oregon. (Romance Langs.)

EUGENE KLEIN, of Philadelphia, has accepted an invitation from the Management of the International Philatelic Exhibition to be held under the auspices of the Austrian Government at Vienna on June 24 to July 9, to be one of the jury of judges of the Exhibition. The jury will consist of philatelists from nineteen different countries.

MILES L. HANLEY, Professor of English at the University of Wisconsin, has had leave of absence for 1931-2 and 1932-3 to enable him to take part in the preparation of the Linguistic Atlas of the United States and Canada, and during this time he has been temporarily attached to Harvard University as Lecturer in English. (This is a correction of the statement in Language 8.325.)

THE TENTH ANNUAL MEETING of the Linguistic Society of America will be held at Washington D. C., December 29 and 30, 1933, in conjunction with the meetings of the American Philological Association and the Archaeological Institute of America.

PROCEEDINGS
OF THE
LINGUISTIC SOCIETY OF AMERICA
AT THE NINTH ANNUAL MEETING
NEW HAVEN, DECEMBER 27 AND 28, 1932

The Ninth Annual Meeting of the Society was held at New Haven, Connecticut, on Tuesday and Wednesday, December 27-8, 1932, jointly with the Modern Language Association of America, at the invitation of Yale University. The headquarters of the Society was the Yale Hall of Graduate Studies, where the registration office was placed and all sessions were held.

Record was secured of the attendance of the following members and members-elect of the Society; other members were present, but failed to give their names to the Secretary:

B. M. Allen.
A. P. Ball, G. Bechtel, F. R. Blake, J. Bloch, G. M. Bolling, C. D. Buchanan.
C. U. Clark, A. P. Coleman, E. Cross.
C. J. Donahue, R. P. Dougherty, J. Dunn.
F. Edgerton, M. B. Emeneau.
Mrs. I. Fleet.
C. Grimm.
Miss L. Haessler, Miss E. A. Hahn, M. A. Hamilton, M. L. Hanley, R.-M. S. Heffner, A. A. Hill, Mrs. F. W. Hopkins, J. P. Hoskins, S. A. Hurlbut.
R. P. Jameson.
R. G. Kent, J. S. Kenyon, J. Kepke, C. A. Knudson, Miss K. E. Kümmerle, H. Kurath.
P. de La Rochelle, G. Laves, W. R. Long, C. M. Lotspeich.
K. Malone, A. H. Marckwardt, A. P. Martin, H. Meier, G. A. Meyer, S. Moore.
S. S. Newman.
C. J. Ogden, C. K. Ogden, B. J. Olli.
J. J. Parry, C. Pharr, Mrs. H. P. Pond, J. W. Poultney, Miss L. Pound, H. T. Price, E. Prokosch.
A. W. Read, A. F. J. Remy, K. Reuning, C. C. Rice, H. B. Richardson, M. H. Roberts, H. Rosen, G. O. Russell.
E. Sapir, C. Selmer, D. B. Shumway, F. W. Strothmann, E. H. Sturtevant, M. Swadesh.

G. L. Trager, R. W. Tucker.

H. Whitehall, B. L. Whorf, H. F. Wilkens, W. F. Wyatt.

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The First Session of the Linguistic Society was held in Room 217, Hall of Graduate Studies, on the evening of Tuesday, December 27. President Bolling called the meeting to order at 7.35 P.M. About 65 persons were present at the session.

By motion, the reading of the minutes of the last meeting was dispensed with, as they had already been printed in *LANGUAGE* 8.63-77.

The Secretary, Professor R. G. Kent, presented the following report, which was ordered to be received and filed:

For the year 1932 the membership statistics are as follows: For the year 1931 there were 495 members, of whom 3 died during the year: E. B. Lease, A. P. Weiss, C. Wessely; 22 (A. W. Aron, J. Bonfante, A. H. Byrne, P. R. Carr, F. S. Cawley, G. D. Chase, L. W. Conklin, G. S. Cooke, E. E. Ericson, G. M. Fess, W. E. Gilman, P. K. Hitti, O. M. Johnston, O. L. Keith, E. O. Koch, C. A. Messner, P. S. Miller, A. R. Morris, J. Rahder, G. A. Reichard, R. H. Tanner, L. O. Wright) presented their resignations, effective at the end of 1931; 12 were dropped from the membership list, as directed by the Constitution of the Society in the case of those who have failed for two years to pay the membership dues. The net membership with which the Society started 1932 was, therefore, 458; the new members of 1932 are 40. The total membership for 1932, in addition to the 20 honorary members, is accordingly 498; of these, 24 are unpaid for 1931-2 and subject to being dropped from the rolls at this time, and 43 are unpaid (2 others partly unpaid) for 1932. We regretfully record the death of one Honorary Member, Eduard Sievers, and of three active members: G. W. Brown, E. C. Hills, E. W. Hopkins.

The library subscriptions have increased from 144 to 147 (of which 3 are unpaid for 1932) by the cancellation of 8 and the addition of 11.

The exchanges and copies for review have increased from 72 to 78 by the addition of 6.

The foreign scholars receiving the publications gratuitously now number 131; the changes during the year have been few.

It will be noted that 1932 is the first year since the foundation of the Society which has not marked a distinct gain in active membership, the final figures (exclusive of honorary members) being successively 323, 355, 381, 388, 428, 455, 495, (1932) 498, and it is also the first year in which there has not been a considerable gain in the net resources of the Society. In 1932, indeed, the estimate of Assets and Liabilities to December 31 shows a slight net loss. This should not be viewed with alarm, since the Society has published and distributed to members in 1932 a total of 1034 printed pages, as compared with previous totals of 615 in 1931, 712 in 1930, 791 in 1929. It is however desirable that we should unite in presenting to other scholars the advantages of membership in the Society, and in this way continue the uninterrupted progress which the Society has made since its foundation in 1924.

As Treasurer, Professor Kent then presented the following report, which was ordered received and filed, pending the report of the Auditors:

LINGUISTIC SOCIETY OF AMERICA

Treasurer's Report, Dec. 22, 1931, to Dec. 21, 1932

Balance from previous year (checkable).....		\$2132.62
Receipts:		
Dues for 1930 (1), 1931 (28), 1932 (405).....	\$2163.92	
Library subscriptions for 1931 (3), 1932 (112).....	574.72	
Advance dues, 13 members, 34 libraries.....	235.15	
Remittance from unidentified sender.....	4.94	
Sale of regular publications, back volumes and single issues.....	326.59	
Sale of Kent's <i>Old Persian Inscriptions</i> , 28 copies.....	18.65	
Gift.....	1.00	
For <i>Vedic Variants</i> account:		
Transferred from separate bank account:		
Balance.....	\$1938.01	
Sales of Vol. I.....	16.16	
Bank Interest.....	13.02	\$1967.19
By Sales of Vol. I.....	46.94	
Corrections to Vol. II, paid by author..	72.95	
By Sales of Vol. II.....	282.24	2369.32
Reprints, covers, etc.....	12.90	
Interest on checkable account, savings account, funds with Protat.....	158.20	
Interest, on Endowment Fund Investments.....	100.00	
Refund of duplicate payment 2.33, postdated checks 10.00, funds for transmission 16.75, check on failed bank 30.41.....	59.49	
For Endowment Fund of Linguistic Institute.....	\$198.00	
For current funds of Ling. Inst., from Director.....	91.57	
Subvention to article, by G. S. Lowman.....	37.50	
Subvention to <i>Monograph No. 10</i> , balance, from IALA..	356.98	
Subvention to <i>Monograph No. 11</i> , balance, from author.	.52	
Subvention to <i>Monograph No. 12</i> , partial, by sale of author's copies to his students.....	177.23	
Subvention to <i>Dissertation No. 10</i> , additional, from author.....	200.00	
Subvention to <i>Dissertation No. 11</i> , from author.....	420.00	
Subvention to <i>Dissertation No. 12</i> , from author.....	250.00	
Subvention to <i>Dissertation No. 13</i> , from author.....	225.00	
Subvention to <i>Dissertation No. 14</i> , from author.....	295.00	
Subvention to <i>Dissertation No. 15</i> , from author.....	175.00	8451.68
Total Funds available.....		\$10584.30

Disbursements:

Secretary's expenses to and at Richmond meeting	\$21.15	
Secretary's extra expenses visiting French printer	7.87	
Editor's allowance for expenses, to Dec. 31, 1931	50.00	
Office expenses: stationery, printing, postage, equipment, mimeo- graphing and addressing, telephone, telegrams, binding, insur- ance on manuscripts, copyright of Monog. No. 12	374.55	
Office expenses: clerk	190.71	
Notices and Circulars, etc., of Ninth Meeting	53.65	
Dues of 1932, in American Council of Learned Societies	25.00	
Duplicate payment 2.33, postdated checks 10.00, loss in mails 8.00, transmitted 16.75, check on failed bank 30.41	67.49	
Tax on checks86	
Linguistic Institute, interest on endowment funds	88.55	
Back publications, bought for stock	20.00	
<i>Vedic Variants</i> , to Waverly Press for manufacturing and transport of Vol. II	\$1985.82	
To Waverly Press for Circulars	23.00	
Clerk, stamps, etc.	49.25	2058.07
Waverly Press, Inc.:		
LANGUAGE VII.4 and reprints	416.50	
LANGUAGE VIII.1 and reprints	550.33	
LANGUAGE VIII.2 and reprints	315.41	
LANGUAGE VIII.3 and reprints	451.21	
<i>Monograph No. 10</i>	955.05	
<i>Monograph No. 12</i>	870.37	
<i>Dissertation No. 10</i>	440.92	
Wrappers and cash disbursements	38.89	4038.68
Protat Frères, remittances and interest credited:		
<i>Monograph No. 11</i> and bonus	222.40	
<i>Dissertation No. 11</i> and bonus	456.90	
<i>Dissertation No. 12</i> and bonus	258.91	
Balance to Society's credit	41.50	979.71
Disbursement on <i>Diss. No. 13</i>75	
To authors of reviews, etc.	89.10	
Refunds on excess deposits:		
On <i>Lang. Diss. No. 10</i> , to H. F. Standerwick	58.13	
On <i>Lang. Diss. No. 11</i> , to A. L. Rice	40.34	
On <i>Lang. Diss. No. 12</i> , to E. H. Sturtevant	38.50	8203.11
Balance on deposit in the First National Bank of Phila- delphia, 32nd and Market Sts.	2395.88	
Less check 765 outstanding	14.69	2381.19

Schedule of Assets and Liabilities, to Dec. 31, 1932

Assets:

Cash in checkable account, First National Bank of Philadelphia.....	\$2381.19	
Cash in savings account, Integrity Trust Co., 36th and Walnut Sts., Philadelphia.....	3000.00	
Accrued interest on preceding (estimated).....	65.00	
Accrued interest on endowment investments.....	41.67	
Balance with Protat Frères, Macon, France.....	41.50	
Balance due from author of <i>Monograph No. 12</i>	252.90	
Recoverable arrears of dues and subscriptions (est.)..	100.00	
Unpaid sales of regular publications.....	91.00	
Unpaid sales of <i>Vedic Variants</i>	90.00	\$6063.26

Liabilities:

Secretary's expenses, New Haven Meeting.....	15.00	
Clerical and office expenses to Dec. 31.....	35.00	
Editor's allowance, 1932... ..	50.00	
Dues and subscriptions paid in advance.....	240.09	
Language VIII.4, with reprints and honoraria for reviews (estimated).....	550.00	
Language Dissertation No. 13, deposit.....	224.25	
Language Dissertation No. 14, deposit.....	295.00	
Language Dissertation No. 15, deposit.....	175.00	
Vedic Variants Fund, balance and due.....	401.25	
Linguistic Institute Endowment Funds in savings account.....	1027.00	
Linguistic Institute, current funds.....	121.98	3134.57

Estimated Net Balance, in addition to Endowment Funds (General \$935; Ling. Inst. \$2092).....	\$2928.69
Actual Net Balance, Dec. 31, 1931.....	\$2986.09

The financial reports of the Vedic Variants Series and of the Linguistic Institute are embodied in the general report of the Treasurer, where they are easily separable from the other items. The report of the Trustees of the Endowment Fund is here appended:

The Trustees of the Endowment Fund report that during the year 1932 the sum of \$198.00 has been received for the Endowment Fund of the Linguistic Institute, being turned over by the Director of the Linguistic Institute to the Treasurer of the Society; and that these funds have been left in the hands of the Treasurer, and have been placed in the Savings Fund of the Integrity Trust Co., with the \$829.00 which was reported last year.

The Endowment Funds are therefore as follows:

Linguistic Society of America.	\$935.00
Linguistic Institute.	2092.00

The Funds are thus invested:

2 \$1000 Five per cent Guaranteed Mortgage Certificates of the Integrity Trust Co., Philadelphia.	2000.00
Funds in the Savings Account with the Integrity Trust Co., Philadelphia, in the name of the Linguistic Society of America.	1027.00

The Treasurer of the Linguistic Society reports the receipt of the interest as due, amounting to \$100.00 on the Mortgage Certificates; and that \$88.55 was paid to the Director of the Linguistic Institute as its share of the income from the Mortgage Certificates and the Savings account up to August 1, 1932, when the last interest payment on the Mortgage Certificates was received.

(signed) Arthur R. Spencer
F. Corlies Morgan
Roland G. Kent

Dec. 23, 1932

On behalf of the Executive Committee, the Secretary presented the following report:

During the year the Executive Committee, acting by correspondence, fixed the time and place of the present meeting, and elected to membership in the Society the several lists of nominees for membership published in *LANGUAGE* as elected in 1932.

President Bolling appointed R. G. Kent as delegate of the Society to the Congress of the Association Guillaume Budé of Paris, held at Nimes, March 30 to April 2; E. C. Roedder as delegate at the inauguration of William A. Boylan as President of the Brooklyn College on June 21; Franz Boas as delegate to a Conference of Universities on the Obligation of Universities to the Social Order, held under the auspices of New York University at the Hotel Waldorf-Astoria in New York City, November 15 to 17; E. D. Cressman as delegate to the opening of the Mary Reed Library, of the University of Denver, October 28.

By a mail vote taken in October, the Executive Committee approved the continuance of the Administrative Committee of the Linguistic Institute, with the membership reduced to three, namely, Prof. E. H. Sturtevant, Director; C. U. Clark; and R. G. Kent, ex-officio. It approved also the holding of an Institute in 1933, if satisfactory arrangements could be made.

The Executive Committee, with the Committee on Publications and the Administrative Committee of the Linguistic Institute, met on Tuesday, December 27, 1932, in Room 303, Hall of Graduate Studies, Yale University, New Haven. Present, Messrs. Bolling, Kent, Edgerton, Moore, Sapir, Clark; and by invitation, Miss Hahn, Mrs. Fleet, Messrs. Blake, Lotspeich, Prokosch, Richardson.

Nominees for membership, whose names are printed elsewhere in *LANGUAGE*, were elected to membership.

Professor H. B. Richardson, of the Local Committee, made a brief statement of the arrangements for the comfort and the entertainment of the visitors.

The reports of the Secretary, of the Treasurer, of the Editor, of the Director of the Linguistic Institute, of the Delegates to the American Council of Learned Societies, were informally presented and their contents considered. On motion, by a vote of six to three, the Secretary was requested to omit the printed listing of the names of members dropped from the membership roll for non-payment of dues. The resolution proposed by the Director of the Linguistic Institute was formally approved.

The Committee recommends that a definite appropriation of Three Hundred Dollars per annum be made to the Secretary and Treasurer, from which he shall pay for all clerical assistance on the regular work of the Society (but not on that connected with Special Publications, for which special funds are set aside), and that the allowance to the Editor be increased to One Hundred Dollars per annum; this arrangement to begin with 1933.

The Committee appointed Eduard Prokosch as delegate to the American Council of Learned Societies, for the term 1933-6, succeeding Leonard Bloomfield, whose term expires on December 31, 1932.

The Committee considered a number of nominations for Honorary Membership, and in accordance with Article II, Section 6 of the Constitution, it recommends that the following scholars be elected to Honorary Membership:

Professor Karl Brockelmann, of Breslau.

Professor Karl Luick, of Vienna.

Professor Émile Boisacq, of Brussels.

The Executive Committee asks that the Society express its approval of these actions and recommendations.

The report was ordered received and filed. On motion the nominees for Honorary Membership were elected. On motion the remaining actions and recommendations of the Committee were approved.

Professor G. M. Bolling, Editor of the Publications of the Society and Chairman of the Committee on Publications, presented the following report, which was ordered received and filed:

I have the honor to report for the Committee on Publications that during the year 1932 we have issued:

LANGUAGE, Volume VIII, 326 pages.

LANGUAGE MONOGRAPH No. 10: Edward Sapir and Morris Swadesh, *The Expression of the Ending-Point Relation in English, French, and German*, edited by Alice V. Morris, 125 pages.

LANGUAGE MONOGRAPH No. 11: Dael Lee Wolfe, *The Relation between Linguistic Structure and Associative Interference in Artificial Linguistic Material*, 55 pages.

LANGUAGE MONOGRAPH No. 12: Roland G. Kent, *The Sounds of Latin*, 216 pages.

LANGUAGE DISSERTATION No. 10: Henry Fischer Standerwick, *Etymological Studies in the Greek Dialect-Inscriptions*, 87 pages. Columbia University Dissertation.

LANGUAGE DISSERTATION No. 11: Allen Lake Rice, *Gothic Prepositional Compounds in their relation to their Greek originals*, 142 pages. University of Pennsylvania Dissertation.

LANGUAGE DISSERTATION No. 12: Grace Sturtevant Hopkins, *Indo-European *deiws and Related Words*, 83 pages. Yale University Dissertation.

SPECIAL PUBLICATION: Maurice Bloomfield and Franklin Edgerton, *Vedic Variants II: Phonetics*, 570 pages.

We have in the press the following, for distribution in 1933:

LANGUAGE MONOGRAPH No. 13: George L. Trager, *The Old Church Slavonic Kiev Fragment: its accents and their relation to modern Slavonic accentuation*, about 28 pages.

LANGUAGE DISSERTATION No. 13: Charles Francis Bauer, *The Latin Perfect Endings -ere and -erunt*, 79 pages. University of Pennsylvania Dissertation.

LANGUAGE DISSERTATION No. 14: George Kleppinger Strodach, *Latin Diminutives in -ello/-ā- and -illo/-ā-: a study in diminutive formation*, about 100 pages. University of Pennsylvania Dissertation.

LANGUAGE DISSERTATION No. 15: Charles D. Buchanan, *Substantivized Adjectives in Old Norse*, about 64 pages. Cornell University Dissertation.

Other publications are under consideration.

I desire to call attention to two matters.

1. The second volume of the *Vedic Variants* equals, if it does not exceed, in interest and importance the first volume, which has been welcomed by reviewers as indispensable to all workers in its field. I would urge upon the Society that every effort be made to push this project to its completion without any avoidable delay.

2. While the work published by the Society is gratifying in its quantity (its quality had best be left to the judgment of others), it is regrettable that the work is distributed very unequally over the linguistic field. This comes not from any prepossession of the Editor or the Committee, but is the natural effect of the type of communications offered for publication. If members desire different results, the remedy rests with themselves, and the Committee will be glad to assist in securing more even representation of the various languages.

I desire to express the appreciation of myself and of the Committee of the support that we have received from other members of the Society and especially from Professor Roland G. Kent.

Professor E. H. Sturtevant presented the following report as Director of the Linguistic Institute:

No session of the Linguistic Institute was held in 1932. Negotiations were undertaken looking toward a session in 1933, and for a time it seemed likely that plans for such a session could be reported at this time. Difficulties were encountered, however, which have not yet been removed.

During the year interest on the Endowment of the Linguistic Institute, amounting to \$88.55, has been received from the Treasurer of the Society, and this amount, together with contributions of \$198.00 for the principal of the Endowment, and \$3.02 of current funds from other sources, has been returned to him for safekeeping.

The Administrative Committee recommends the adoption of the following resolution:

Resolved, that the Linguistic Society of America hereby empowers the Execu-

tive Committee to authorize a session of the Linguistic Institute in 1934, to appoint an Administrative Committee to conduct such a session, and to determine where such session shall be held.

On motion, the report was received and the resolution was adopted.

Professor E. H. Sturtevant, for the delegates to the American Council of Learned Societies (E. H. Sturtevant, L. Bloomfield) presented the following report, which was ordered received and filed:

The annual meeting of the American Council of Learned Societies was held in Washington on January 29 and 30, 1932. The Linguistic Society of America was represented by one of its delegates and by its secretary. The proceedings of the meeting have been published in *Bulletin No. 18* of the Council.

One of the major projects of the Council is the *Linguistic Atlas of the United States and Canada*, a project of peculiar interest to the Linguistic Society, which is being executed largely by some of our members. This task could not have been undertaken without the support of the Council, and it owes not a little to the cooperation of the Linguistic Society through the Linguistic Institute.

Equally important for our work is the research in Native American Languages, which has progressed so far that eight books are now in press and several others are nearly ready for publication.

The President announced the appointment of the following Committee:

On Nominations of Officers for 1933: E. H. Sturtevant, Chairman;
E. C. Armstrong; W. F. Albright.

The president appointed the following Committees:

To Audit the Accounts of the Treasurer: C. M. Lotspeich, E. Sapir.

On Resolutions: Miss E. A. Hahn, F. R. Blake, H. Kurath.

Dr. Ephraim Cross announced that the Modern Language Association of America was at this time forming a new section, devoted to the Languages and Literatures of Belgium, the first meeting of which would be held on December 29.

Other business, proposed by any member of the Society, was called for, and there being none, the reading of papers was begun:

Mr. A. W. Read, of the University of Chicago: The Pronunciation of the Word *Missouri*. Discussion by Messrs. Hanley, Sapir, Kent, Miss Hahn, and others.

- Prof. G. O. Russell, of the Ohio State University: The X-Ray as an Aid in Phonological Research. Discussion by Messrs. Hanley, Treviño, Kurath, Sturtevant.
- Dr. Ephraim Cross, of the City College, New York: Romance Linguistics as a Basis for Indo-European and General Linguistics.
- Prof. Joseph Dunn, of the Catholic University of America: The Celto-Hamitic Hypothesis. Discussion by Messrs. Sapir, Cross.
- Prof. F. R. Preveden, of DePaul University: The Rôle of Animal Names in the Development of the Vocabulary. (Presented by title only, in the absence of the author.)

Adjournment was taken at 10.00 P.M.

The Second Session was held in Room 217, Hall of Graduate Studies, on the morning of Wednesday, December 28. President Bolling called the meeting to order at 9.35 A.M. About 70 persons were present at the session. The reading of papers was at once begun:

- Dr. A. P. Coleman, of Columbia University: The Expression of the Ending-Point Relation in Polish. Discussion by Messrs. Edgerton, Cross, Trager.
- Prof. W. R. Long, of Tarkio College: The Aragonese Dialect of Escorial Z-I-2 Ms. of Ferrandez de Heredia.
- Prof. H. T. Price, of the University of Michigan: The Early Modern English Dictionary.
- Prof. E. H. Sturtevant, of Yale University: Archaism in Hittite. Discussion by Messrs. Bolling, Prokosch, Lotspeich, Sapir, Kent, Hinckley, Trager, Moore.
- Mr. B. L. Whorf, of Wethersfield, Conn.: Characteristics of the Uto-Aztec Stock. Discussion by Messrs. Sapir, Cross.
- Prof. F. W. Strothmann, of Stanford University: Recent German Theories about Change of Meaning. Discussion by Messrs. Cross, Moore, Kurath.
- Prof. R. G. Kent, of the University of Pennsylvania: A New Inscription of Xerxes.
- Prof. Frank R. Blake, of The Johns Hopkins University: The Parts of Speech. Discussion by Mr. Cross, Miss Hahn, Messrs. Whorf, Sapir, Swadesh, Miss Haessler, Messrs. Kent, Rosen.
- Prof. F. R. Preveden, of DePaul University: Some Balto-Slavonic Terms of Mental Functions. (Presented by title only.)

Prof. Maria W. Smith, of Temple University: An Avestan Etymology.
(Presented by title only.)

Adjournment was taken at 12.40 P.M.

The Third Session of the Linguistic Society was held in Room 217, Hall of Graduate Studies, on the afternoon of Wednesday, December 28. President Bolling called the meeting to order at 2.35 P.M. About 75 persons were present at the session. The reading of papers was at once begun:

Dr. A. H. Marckwardt, of the University of Michigan: Some Aspects of the Irregular Weak Conjugation in Middle English. Discussion by Mr. Hill, Miss Haessler.

Prof. W. F. Wyatt, of Tufts College: Some Semantic Studies in New Testament Greek.

Prof. E. Adelaide Hahn, of Hunter College: Does Hittite Indicate a Development of the Relative from the Indefinite? Discussion by Messrs. Sturtevant, Cross.

Prof. C. M. Lotspeich, of the University of Cincinnati: The Old English Verb-Type *cnāwan cnēow*. Discussion by Mr. Sturtevant.

Dr. G. L. Trager, of Newark, N. J.: The Development of the Indo-European Voiced Aspirates in Italic. Discussion by Messrs. Sapir, Bolling, Lotspeich, Kent, Sturtevant.

Prof. C. C. Rice, of Catawba College: Romance Etymologies. Discussion by Messrs. Naylor, Cross, Kent.

Prof. C. E. Parmenter, of the University of Chicago: The Influence of a Change in Pitch on the Articulation of a Vowel. (Presented by title only, in the absence of the author.)

A brief business session followed.

Professor Sturtevant, for the Committee on Nominations, presented the following report, which, in the absence of nominations from the floor, was adopted in the usual manner, and the nominees were declared elected:

President, Professor Edward Sapir, Yale University.

Vice-President, Professor Samuel Moore, University of Michigan.

Secretary and Treasurer, Professor Roland G. Kent, University of Pennsylvania.

Executive Committee, the preceding, and

Professor Aurelio M. Espinosa, Stanford University.

Professor Leonard Bloomfield, University of Chicago.

Professor Frank R. Blake, Johns Hopkins University.

Committee on Publications:

Chairman and Editor, Professor George Melville Bolling, Ohio State University.

To serve through 1935: Professor C. E. Parmenter, University of Chicago.

Professor Lotspeich, for the Auditors, reported that they had examined the accounts of the Treasurer and found them correct; whereupon on motion the report of the Treasurer was adopted.

Professor Hahn, for the Committee on Resolutions, presented the following report, which was on motion adopted:

Resolved, that the Linguistic Society of America expresses grateful appreciation of the gracious hospitality provided by Yale University and by its representatives; of the efficient services of the Local Committee, especially our own member, Professor H. B. Richardson; and of the cordial coöperation of the officers of the Modern Language Association of America.

Adjournment was taken at 4.50 P.M.

An informal dinner was held at 6.15 P.M., in the Dining Hall of the Yale Graduate School; 76 persons participated.

The Fourth Session of the Linguistic Society was held in Room 217, Hall of Graduate Studies; on the evening of Wednesday, December 28. President Bolling called the meeting to order at 7.45 P.M. About 110 persons were present at the session. The reading of papers was at once begun:

Prof. George Melville Bolling, of the Ohio State University, President of the Linguistic Society of America: The Dual in Homer: Homeric Variants cited from Zenodotus and Aristophanes. Discussion by Mr. Sturtevant.

Prof. Edward Sapir, of Yale University: The Consonant System of Primitive Athabaskan. Discussion by Messrs. Hanley, Edgerton, Cross, Trager, Rosen.

Prof. Hans Kurath, of Brown University: Obsolescent Sounds in New England English. Discussion by Messrs. Cross, Sapir, Kenyon, Hanley, Moore, Long.

Prof. F. H. Wilkens, of New York University: The Personal Curve (Sievers' *Schallanalyse*), Its Nature and Employment.

Prof. Karl Reuning, of Swarthmore College: Child and Language. Discussion by Messrs. Sapir, Price, Swadesh, Cross.

Dr. Harold Whitehall, of the University of Michigan: A Note on a Lancashire Place-Name: Scaitcliffe. (Presented by title only, in the absence of the author.)

Adjournment was taken at 10.45 P.M.

While this Fourth Session concluded the special meetings of the Linguistic Society, many of the members remained for the sessions of the Modern Language Association of America, of which also they were mostly members, and were present at other gatherings to which all the visitors were invited. Thus on Thursday, December 29, a Complimentary Luncheon was given to members of all the visiting societies by Yale University, in the University Dining Hall, at 1.00 P.M. On the same day, at 8.00 P.M., President Angell of Yale University extended the official welcome to the visitors at a general session of the Modern Language Association, in Woolsey Hall. On Friday, members of the Linguistic Society were welcome at the Subscription Dinner of the Modern Language Association, at 7.00 P.M., and at the smoker which followed, when Professor W. L. Phelps was master of ceremonies, and Governor Wilbur L. Cross of Connecticut, formerly Professor and Dean at Yale University, gave the smoke talk.

(signed) ROLAND G. KENT
Secretary.

LIST OF MEMBERS, 1932

This list includes all those who were on the rolls of the Society in 1932. SC before the name indicates Signers of the Call which led to the foundation of the Society, FM indicates Foundation Members, a date indicates the year of election. So far as the information is at hand, the special subject of instruction or of study, or the occupation, is given. Any changes of address or of title, and any errors, should be at once reported to the Secretary of the Society. Later lists will give the names of those who become members during 1933.

ASSOCIATED SOCIETIES

Indogermanische Gesellschaft, bei Prof. Dr. A. Debrunner, Landgrafenstieg 5, Jena, Germany.

Société de Linguistique de Paris, à la Sorbonne, Paris V, France.

HONORARY MEMBERS

- 1927 Prof. Dr. A. Debrunner, Landgrafenstieg 5, Jena, Germany.
1930 Prof. Dr. H. Hirt, Loeberstr. 23, Giessen, Germany.
1927 Prof. Dr. Otto Jespersen, Ermelundsly, Gentøfte, Copenhagen, Denmark.
1929 Prof. Dr. P. Kretschmer, Florianigasse 23, Wien VIII, Austria.
1927 Prof. A. Meillet, 24 Rue de Verneuil, Paris VII, France.
1929 Prof. Dr. C. Meinhof, Beneckestr. 22, Hamburg XIII, Germany.
1929 Prof. R. Menéndez Pidal, Centro de Estudios Historicos, Almagro 26, Madrid, Spain.
1928 Prof. Dr. W. Meyer-Lübke, Universität, Bonn, Germany.
1932 Prof. Dr. Hanns Oertel, Pienzenauerstr. 36, München 27, Germany.
1930 Prof. Dr. Holger Pedersen, Gersonsvej 69 II, Copenhagen, Denmark.
1927 Dr. P. Rivet, 61 Rue de Buffon, Paris, France.
1931 Prof. Dr. Emil Setälä, Jarvenpaa, Finland.
1928 Prof. Dr. Ed. Sievers, Leipzig, Germany. Died March 30, 1932.
1928 Prof. Dr. F. Sommer, Ludwigstr. 22, München, Germany.
1931 Prof. Dr. R. Thurneysen, Meckenheimerallee 55, Bonn, Germany.
1930 Prof. Dr. C. C. Uhlenbeck, Wijerstraat 10, Amersfoort, Netherlands.
1932 Prof. Dr. Arthur Ungnad, Kronprinzen-Allee 19, Falkenhain, Post Finkenkrug, Germany.

- 1932 Prof. Dr. N. Van Wijk, Nieustraat 36, Leiden, Netherlands.
 1927 Prof. Dr. Jakob Wackernagel, Gartenstr. 93, Basel, Switzerland.
 1927 Prof. Henry Cecil Wyld, Merton College, Oxford, England.

ACTIVE MEMBERS

- FM Prof. Arthur Adams, Trinity College, Hartford, Conn. (English)
 1928 Mr. J. H. Adams, Kennett Square, Pa.
 1929 President Cyrus Adler, The Dropsie College, Philadelphia, Pa.
 (Semitics)
 1929 Prof. W. F. Albright, Johns Hopkins Univ., Baltimore, Md.
 (Semitics)
 1930 Prof. Henry S. Alexander, Queen's Univ., Kingston, Canada.
 (English)
 FM Prof. Joseph E. A. Alexis, 1420 Garfield St., Lincoln, Neb.
 (Romance Langs., Univ. of Nebraska)
 1926 Mr. Bernard M. Allen, Cheshire, Conn. (Latin, Roxbury
 School)
 1926 Prof. Louis Allen, Univ. of Toronto, Toronto, Canada. (French)
 1927 Mr. Wm. H. Allen, 3345 Woodland Av., Philadelphia, Pa.
 (Bookseller)
 1929 Prof. Clara J. Allison, 1010 Washtenaw Av., Ypsilanti, Mich.
 (Latin, Mich. State Normal College)
 FM Prof. Hermann Almstedt, Univ. of Missouri, Columbia, Mo.
 (Germanic Langs.)
 1931 Mr. W. A. Amiet, M. A., Mackay, North Queensland, Australia.
 (Barrister-at-law)
 1926 Prof. Manuel J. Andrade, Univ. of Chicago, Chicago, Ill. (An-
 thropology)
 1925 Prof. A. LeRoy Andrews, Cornell Univ., Ithaca, N. Y.
 (German)
 1925 Prof. Edward C. Armstrong, 26 Edgehill St., Princeton, N. J.
 (French, Princeton Univ.)
 FM Prof. Earle B. Babcock, Dotation Carnegie, 173 Boulevard
 St.-Germain, Paris, France. (Romance Langs.)
 1932 Prof. Allan P. Ball, City College, Convent Ave. and 139th St.,
 New York City. (Classical Langs.)
 1929 Prof. James C. Bardin, Box 80, University, Va. (Romance
 Langs., Univ. of Virginia)
 SC Prof. LeRoy Carr Barret, Trinity College, Hartford, Conn.
 (Latin)

- FM Prof. Emeritus George A. Barton, 43d and Spruce Sts., Philadelphia, Pa. (Semitic Langs., Univ. of Pennsylvania)
- 1932 Mr. Harold A. Basilius, Univ. of Chicago, Chicago, Ill. (German)
- 1927 Prof. Samuel Eliot Bassett, 295 S. Prospect St., Burlington, Vt. (Greek Lang. and Lit., Univ. of Vermont)
- 1926 Dr. Cláudio Basto, Viana do Castelo, Portugal.
- 1927 Dr. Charles F. Bauer, 3440 Chestnut St., Philadelphia, Pa. (Principal, Temple Univ. High School, Philadelphia)
- 1932 Mr. George Bechtel, 2030 Yale Sta., New Haven, Conn. (Research Asst., Yale Univ.)
- 1930 Mr. George Beecher, address unknown.
- FM Dean H. M. Belden, 811 Virginia Av., Columbia, Mo. (English, Univ. of Missouri)
- SC Prof. Harold H. Bender, 120 Fitz Randolph Road, Princeton, N. J. (Indo-Germanic Phil., Princeton Univ.)
- 1927 Prof. Adolph B. Benson, 221 L. O. M. Yale Univ., New Haven, Conn. (German and Scandinavian)
- FM Mr. Morris Berg, 92 S. 13th St., Newark, N. J. (Romance Langs.)
- 1931 Miss Nell D. Blair, 1309 Dupont St., Wilmington, Del. (Latin, Wilmington High School)
- FM Prof. Frank R. Blake, 2205 Arden Road, Mt. Washington, Baltimore, Md. (Oriental Langs., Johns Hopkins Univ.)
- 1931 Mr. Bernard Bloch, 96 College St., South Hadley, Mass. (English, Mt. Holyoke College; Field-Worker on Linguistic Atlas)
- 1928 Prof. D. S. Blondheim, American University Union, 173 Bd. St.-Germain, Paris VI, France. (Romance Phil., Johns Hopkins Univ.)
- SC Prof. Leonard Bloomfield, Univ. of Chicago, Chicago, Ill. (Germanic Phil.)
- SC Prof. Franz Boas, Columbia Univ., New York City. (Anthropology)
- FM Mr. George Bobrinskoy, Univ. of Chicago, Chicago, Ill. (Sanskrit)
- 1928 Prof. Émile Boisacq, 271 Chaussée de Vleurgat, Ixelles-Bruxelles, Belgium. (Sanskrit and Comparative Phil., Univ. of Brussels)
- SC Prof. George Melville Bolling, Ohio State Univ., Columbus, Ohio. (Greek) Life Member, 1927.
- 1929 Prof. Benjamin P. Bourland, 11105 Euclid Av., Cleveland, Ohio. (Romance Langs., Adelbert Coll.)

- 1926 Prof. J. L. Boysen, Box 1510, Univ. Sta., Austin, Texas. (Germanic Langs., Univ. of Texas)
- 1929 Mr. Lyman R. Bradley, New York Univ., Washington Sq., New York City. (German)
- 1929 Dr. Renward Brandstetter, Waldstätterhof, Lucerne, Switzerland. (Indonesian Langs.)
- 1930 Dr. Fred H. Braunlin, Bascom Hall, Univ. of Wisconsin, Madison, Wisc. (German)
- 1929 Miss E. D. Breeze, 2330 University Avenue, New York City.
- 1930 Prof. Charles Barrett Brown, Vanderbilt Univ., Nashville, Tenn. (Spanish and Italian)
- FM Prof. George Wm. Brown, Hartford, Conn. Died Dec. 4, 1932.
- 1930 Miss Lydia G. Brown, 1721 S St. N. W., Washington, D. C. (Commercial Subjects, Cardozo High School)
- 1930 Prof. Thomas K. Brown Jr., 226 Dickinson Ave., Swarthmore, Pa. (German, Univ. of Pennsylvania)
- FM Prof. W. Norman Brown, Univ. of Pennsylvania, Philadelphia, Pa. (Sanskrit)
- 1925 Prof. W. F. Bryan, 1907 Orrington Av., Evanston, Ill. (English, Northwestern Univ.)
- 1932 Prof. Charles D. Buchanan, Alfred Univ., Alfred, N. Y. (German)
- SC Prof. Carl D. Buck, Univ. of Chicago, Chicago, Ill. (Comparative Phil.)
- 1926 Dr. Ludlow S. Bull, Metropolitan Museum, New York City. (Egyptology, Metropolitan Museum and Yale Univ.)
- 1932 Mrs. Ethel-Jane Bunting, care of Maya Society, Johns Hopkins Univ., Baltimore, Md. (Research Asst., Maya Langs.)
- 1928 Miss Ruth A. Bunzel, Dept. of Anthropology, Columbia Univ., New York City. (Lang. and Ethnology of North American Indians)
- FM Prof. Robert B. Burke, Univ. of Pennsylvania, Philadelphia, Pa. (Latin)
- 1929 Prof. Romanus F. Butin, Catholic Univ., Washington, D. C. (Oriental Langs.)
- 1931 Prof. Morgan Callaway Jr., 1206 Guadalupe St., Austin, Tex. (English, Univ. of Texas)
- FM Prof. A. U. N. Camera, 575 Dahill Road, Brooklyn, N. Y. (Romance Langs., Brooklyn College)
- 1927 Prof. Harry Caplan, Cornell Univ., Ithaca, N. Y. (Classics)

- 1925 Prof. Frederick M. Carey, 405 Hilgard Av., West Los Angeles, Calif. (Greek and Latin, Univ. of Calif. at Los Angeles)
- 1929 Mr. P. W. Carhart, care of G. & C. Merriam Co., Springfield, Mass. (Editor)
- 1931 Dr. Alice Carlson, Hospitalu Ielā 51, Dz. 6, Riga, Latvia. (English Phil., Univ. of Latvia)
- 1929 Prof. Clive H. Carruthers, McGill Univ., Montreal, Canada. (Classical Philology)
- 1927 Prof. Jane Gray Carter, 175 Riverside Drive, New York City. (Classics, Hunter College)
- 1930 Jagadish J. Chatterji, Esq., The International School of Vedic and Allied Research, 200 West 57th St., New York City.
- 1931 Prof. K. Chaṭṭopadhyāya, The University, Allahabad, India. (Sanskrit)
- 1930 Prof. Edward Chiera, Oriental Institute, Univ. of Chicago, Chicago, Ill. (Assyriology)
- FM Dr. Edith Frances Clafin, 17 Felton Hall, Cambridge, Mass. (Greek and Latin, Rosemary Hall, Greenwich, Conn.)
- 1926 Mr. John M. Clapp, 15 E. 26th St., New York City. (Publisher)
- 1932 Prof. Charles Upson Clark, City College, Convent Ave., New York City. (Languages)
- 1925 Prof. Walter E. Clark, 39 Kirkland St., Cambridge, Mass. (Sanskrit, Harvard Univ.)
- 1930 Dr. Arthur P. Coleman, Columbia Univ., New York City. (Slavonic Langs.)
- 1931 Prof. William Edward Collinson, 9 Bertram Road, Liverpool, England. (German and Comp. Phil., Univ. of Liverpool)
- SC Prof. Emeritus Hermann Collitz, 1027 N. Calvert St., Baltimore, Md. (Germanic Phil., Johns Hopkins Univ.)
- 1927 Dr. Klara H. Collitz (Mrs. Hermann), 1027 N. Calvert St., Baltimore, Md. (Germanic Philology)
- FM Prof. Roberta D. Cornelius, Randolph-Macon Woman's College, Lynchburg, Va. (English)
- 1927 Prof. Cornelia C. Coulter, Mount Holyoke College, South Hadley, Mass. (Latin)
- FM Prof. Hardin Craig, Stanford University, Calif. (English)
- 1926 Prof. W. A. Craigie, Univ. of Chicago, Chicago, Ill. (English)
- 1931 Mr. F. Stuart Crawford Jr., 71 S. Pleasant St., Amherst, Mass. (Greek, Amherst Coll.)
- FM Prof. J. P. Wickersham Crawford, Univ. of Pennsylvania, Philadelphia, Pa. (Romanic Langs. and Lits.)

- 1932 Mr. H. G. Creel, care of National City Bank of New York, Peiping, China. (Research Fellow in China, American Council of Learned Societies)
- 1926 Prof. E. D. Cressman, 2287 S. Columbine St., Denver, Colo. (Classics, Univ. of Denver)
- 1927 Dr. Ephraim Cross, 1847 University Av., Bronx, New York City. (Romance Langs., City College)
- 1926 Prof. G. O. Curme, Northwestern Univ., Evanston, Ill. (Germanic Phil.)
- 1930 Dr. Joseph T. Curtiss, Simsbury, Conn. (English)
- 1925 Prof. George H. Danton, 47 College Place, Oberlin, Ohio. (German, Oberlin College)
- 1929 Dr. G. O. S. Darby, 56 West St., Northampton, Mass.
- 1929 Prof. Edward P. Davis, Howard Univ., Washington, D. C. (German)
- FM Jaime de Angulo, Esq., 2851 Buena Vista Way, Berkeley, Calif. (American Linguistics)
- FM Prof. Victor de Beaumont, 73 Queen's Park, Toronto, Canada. (French, Univ. of Toronto)
- FM Prof. Roy Joseph Deferrari, Catholic Univ., Washington, D. C. (Latin)
- 1932 Prof. Robert E. Dengler, Pennsylvania State College, State College, Pa. (Classics)
- FM Prof. Norman W. DeWitt, Victoria Univ., Toronto, Canada. (Latin; Dean of Faculty of Arts)
- 1925 Rev. Frederick W. Dickinson, Incarnate Word College, Broadway, San Antonio, Texas. (Comp. Lit.; Greek, Latin, Hebrew)
- 1930 Mr. William F. Diller, 239 Pine St., Lancaster, Pa.
- FM Prof. Roland B. Dixon, Peabody Museum, Harvard Univ., Cambridge, Mass. (Anthropology)
- FM Prof. Raymond P. Dougherty, 83 Mill Rock Road, New Haven, Conn. (Assyriology, Yale Univ.)
- FM Prof. Henry Grattan Doyle, George Washington Univ., Washington, D. C. (Romance Langs.)
- 1931 Prof. P. E. Dumont, Johns Hopkins Univ., Baltimore, Md. (Indology)
- 1932 Prof. Gertrude H. Dunham, Smith College, Northampton, Mass. (German)
- FM Prof. Joseph Dunn, 47 Vista Terrace, New Haven, Conn. (Celtic and Romance Philology, Catholic Univ., Washington)

- 1929 Mrs. Milton L. Durlach (Theresa M.), 875 Park Av., New York City.
- 1927 Miss Helen S. Eaton, 64 W. Ninth St., New York City. (Linguistic Research Assistant to the International Auxiliary Language Association)
- SC Prof. Franklin Edgerton, 174 Blake Road, Hamden, Conn. (Sanskrit, Yale Univ.)
- 1928 Prof. F. C. Edwards, address unknown.
- 1930 Prof. Edward C. Ehrensperger, 304 Canby St., Vermillion, S.D. (English, Univ. of South Dakota)
- 1928 Mr. Arthur G. Eichelberger, 2450 N. Stanley St., Philadelphia, Pa. (Latin, Northeast High School)
- 1929 Mr. Walter T. Eickmann, 446 Twenty-first St., West New York, N. J. (Latin and Eng., Memorial High School)
- 1930 Dr. Stefán Einarsson, 2417 Maryland Ave., Baltimore, Md. (English, Johns Hopkins Univ.)
- 1928 Prof. Emeritus H. C. Elmer, Cornell Univ., Ithaca, N. Y. (Latin)
- 1928 Dr. Murray B. Emeneau, Box 1910 Yale Sta., New Haven, Conn. (Classics, Yale Univ.)
- FM Prof. Erwin A. Esper, Univ. of Washington, Seattle, Wash. (Psychology)
- SC Prof. Aurelio M. Espinosa, Stanford Univ., Calif. (Romanic Langs.)
- FM Prof. B. R. Ewing Jr., Box 62, Washington and Lee Univ., Lexington, Va. (Romance Langs.)
- 1930 Prof. Dean S. Fansler, Riverton, Conn. (English, Brown Univ.)
- 1930 Rev. F. J. Feinler, The Catholic University, Peiping, China. (Japanese, mathematics, etc.)
- 1932 Dr. Sigmund Feist, Weinbergsweg 13, Berlin N. 54, Germany.
- 1931 Miss Frances M. Fernald, 2115 H St. N. W., Washington, D. C. (Asst. Specialist for Education, Office of Education, State Dept.)
- 1926 Prof. Oscar F. W. Fernsemer, Brooklyn College, 66 Court St., Brooklyn, N. Y. (German)
- 1927 Prof. Edward Fitch, Hamilton College, Clinton, N. Y. (Greek)
- 1932 Miss Mary C. Fitzpatrick, The St. Mary College, Leavenworth, Kansas. (Latin)
- 1932 Rev. Daniel C. Fives, S.S., Caldwell Hall, Catholic Univ., Washington, D. C. (Graduate student in Classics)
- 1931 Mrs. Irvin Fleet (Eleanor Segal), 4807 N. 13th St., Philadelphia, Pa.

- 1931 Prof. Otto S. Fleissner, Wells College, Aurora, N. Y. (German)
- 1930 Prof. Harris S. Fletcher, Univ. of Illinois, Urbana, Ill. (English)
- SC Prof. George T. Flom, 611 W. Green St., Urbana, Ill. (Scandinavian Langs. and Lit., Univ. of Illinois)
- FM Mr. Maynard D. Follin, Box 118, Detroit, Mich.; winter address, Dunedin, Fla.
- FM Prof. Frank H. Fowler, 1036 E. Helen St., Tucson, Ariz. (Classical Langs., Univ. of Arizona)
- 1932 Miss Elizabeth M. Frank, 538 East 134th St., New York City.
- FM Prof. Charles C. Fries, 7 Harvard Place, Ann Arbor, Mich. (English, Univ. of Michigan)
- 1931 Prof. N. Fukushima, care of S. Nishigori, 34 Hikawacho, Akasaka, Tokyo, Japan. (Sanskrit, Imperial Univ. of Tokyo)
- 1930 Miss Mary E. Fulton, Western Penna. Institution for the Deaf, Edgewood, Pittsburgh, Pa.
- 1932 Prof. Juan C. Garcia, 2420 Canal St., New Orleans, La. (French and Spanish, Straight College)
- 1932 Mr. William Gates, President of The Maya Society, Johns Hopkins Univ., Baltimore, Md. (Research Assoc., Maya Langs.)
- 1931 Chatur Bhuj Gehlot, Esq., Supt. of Forests, Marwar State, Jodhpur, Rajputana, India.
- FM Dr. Henry S. Gehman, Princeton Univ., Princeton, N. J. (Semitic Langs.)
- FM Mr. Eugene A. Gellot, 149-46 117th St., Aqueduct, Long Island, N. Y. (Artist)
- 1930 Mr. George H. Genzmer, Dictionary of American Biography, 602 Hill Bldg., 17th St., Washington, D. C.
- 1930 Prof. John L. Gerig, Columbia Univ., New York City. (Celtic and Romance Langs.)
- 1930 Mrs. José Gibert (Catherine Crates), Colorado State Teachers College, Greeley, Colo. (Foreign Languages)
- FM Prof. D. M. Gilbert, Albion College, Albion, Mich. (Modern Langs.)
- 1928 Dr. S. R. Gilcreast, Williams College, Williamstown, Mass. (French and Spanish)
- 1926 Prof. Charles Goetsch, Univ. of Chicago, Chicago, Ill. (Germanic Phil.)
- FM Rabbi Solomon Goldman, 633 Waveland Ave., Lakeview Sta., Chicago, Ill.
- 1927 Miss Jane F. Goodloe, Homewood Apartments, Baltimore, Maryland.

- 1931 Dr. Cyrus Gordon, 7203 Atlantic Ave., Atlantic City, N. J.
(Attached to American School of Oriental Research, Baghdad)
- 1930 Prof. Leo Gosser, Alabama Polytechnic Institute, Auburn, Ala.
(English)
- 1929 Dr. Eugene Gottlieb, Box 3039 Univ. Sta., Columbus, Ohio.
(German, Ohio State Univ.)
- 1928 Prof. Willem L. Graff, McGill Univ., Montreal, Canada. (Germanic Langs.)
- 1928 Prof. Charles H. Grandgent, 107 Walker St., Cambridge, Mass.
(Romance Langs., Harvard Univ.)
- SC Prof. Louis H. Gray, Columbia Univ., New York City. (Oriental Langs.)
- 1928 Prof. Mack Hall Griffin, Box 243, Fayette, Mo. (Latin and Greek, Central College)
- 1926 Prof. Charles Grimm, Williams College, Williamstown, Mass.
(Romanic Langs.)
- 1927 Prof. Wren Jones Grinstead, Univ. of Pennsylvania, Philadelphia, Pa. (Education)
- 1927 Mr. John F. Gummere, Wm. Penn Charter School, Germantown, Philadelphia, Pa. (Languages)
- 1925 Dr. August Günther, Reformgymnasium, St. Ingbert (Saarpfalz), Saar. (Lettic, Coptic)
- 1930 Prof. Walter F. Gustafson, Upsala College, East Orange, N. J.
(English)
- FM Prof. Luise Haessler, Butler Hall, 400 W. 119th St., New York City. (German, Hunter College)
- 1930 Prof. Peter Hagboldt, Univ. of Chicago, Chicago, Ill. (German)
- FM Prof. E. Adelaide Hahn, 640 Riverside Drive, New York City.
(Greek and Latin, Hunter Col.)
- 1932 Prof. Joseph B. Haley, Randolph-Macon College, Ashland, Va.
(Greek)
- FM Prof. A. Irving Hallowell, Univ. of Pennsylvania, Philadelphia, Pa. (Anthropology)
- 1930 Prof. Nelius O. Halvorson, Iowa State Teachers College, Cedar Falls, Iowa. (English)
- 1930 Prof. A. P. Hamilton, Millsaps College, Jackson, Miss. (Latin)
- 1929 Prof. H. A. Hamilton, Elmira College, Elmira, N. Y. (Classical Phil.)
- 1929 Prof. Miles L. Hanley, 32 Bowdoin St., Cambridge, Mass.
(English, Univ. of Wisconsin and Harvard Univ.)

- 1929 Mr. Zellig S. Harris, 5601 Diamond St., Philadelphia, Pa.
(Hebrew, Univ. of Penn.)
- FM Mr. Joel Hatheway, 15 Beacon St., Boston, Mass. (Chairman
of the Board of Examiners of the Bureau of Education)
- 1928 Frank Hawley, Esq., 56 Stanley St., Norton-on-Tees, Durham,
England.
- 1930 Mr. A. Collins Healy, 521 W. 124th St., New York City.
(Gaelic)
- 1930 Rev. Henry J. Heck, Pontifical College Josephinum, Columbus,
Ohio. (Latin and English)
- 1926 Dr. R.-M. S. Heffner, 24 Langdon St., Cambridge, Mass.
(German, Harvard Univ.)
- 1931 Mr. George Herzog, Institute of Human Relations, Yale Univ.,
New Haven, Conn. (Anthropology)
- 1926 Prof. J. W. Hewitt, Wesleyan Univ., Middletown, Conn.
(Classics)
- 1930 Miss Anna Heyberger, Coe College, Cedar Rapids, Iowa.
(French Lang. and Lit.)
- 1928 Prof. Archibald A. Hill, Box 1, University, Va. (English, Univ.
of Virginia)
- 1929 Miss Grace A. Hill, College of the City of Detroit, Detroit,
Mich. (Head of French Dept.)
- 1926 Prof. Raymond T. Hill, 902 Yale Sta., New Haven, Conn.
(French, Yale Univ.)
- FM Prof. Elijah Clarence Hills, Berkeley, Calif. Died April 21, 1932.
- 1931 Mr. Henry B. Hinckley, 38 Lynwood Place, New Haven, Conn.
(Germanic, Latin, Greek)
- 1929 Mr. L. S. Hitchcock, Los Alamos Ranch School, Otowi, N. M.
(Headmaster)
- 1929 Rev. P. Michael Hlavčák, St. Vincent Archabbey, Latrobe, Pa.
(Prof. of Latin, Greek, Slovak)
- 1930 Prof. Richard T. Holbrook, Univ. of California, Berkeley, Calif.
(French)
- 1931 Prof. Lee M. Hollander, 3204 West Ave., Austin, Texas. (Ger-
manic Langs., Univ. of Texas)
- FM Prof. Urban T. Holmes, Univ. of North Carolina, Chapel Hill,
N. C. (French)
- 1930 Miss Josephine W. Holt, John Marshall High School, Richmond,
Va. (Director of Modern Langs., High Schools of Richmond)
- 1931 Mr. Abraham Holtz, 120 E. 105th St., New York City.

- 1925 Prof. E. Washburn Hopkins, New Haven, Conn. Died July 16, 1932.
- FM Mrs. Francis W. Hopkins (Grace Sturtevant), Reed St., Stelton, N. J. (Classics)
- FM Prof. J. Preston Hoskins, 10 College Road, Princeton, N. J. (Germanic Langs. and Lit., Princeton Univ.)
- 1931 Felix Howland, Esq., 2412 Penna. Ave. N. W., Washington, D. C. (Persian Dialects)
- 1930 Rev. Clement R. Hrdlicka, O.S.B., St. Procopius College, Lisle, Ill. (Patristic Latin)
- FM Prof. Harry M. Hubbell, 484 Yale Av., New Haven, Conn. (Greek and Latin, Yale Univ.)
- 1931 Mr. Anton Huffert, 15-11 125th St., College Point, N. Y.
- FM A. M. Huntington, Esq., 1 E. 89th St., New York City. (Author) Benefactor, 1927.
- 1926 Mr. Stephen A. Hurlbut, St. Alban's School, Washington, D. C. (Latin and Greek)
- FM Mr. William A. Hurwitz, 2614 N. 16th St., Philadelphia, Pa. (Languages, W. Phila. High School)
- 1931 Prof. Lucy Hutchins, address unknown.
- 1926 Prof. H. Hyvernatt, 3405 Twelfth St. N. E., Brookland, D. C. (Semitic Langs. and Lits., Catholic Univ.)
- FM Prof. Sanki Ichikawa, 25 Kitayamabushicho, Ushigome, Tokyo, Japan. (English, Tokyo Imperial Univ.)
- 1928 Prof. A. V. Williams Jackson, Columbia Univ., New York City. (Indo-Iranian Langs.)
- 1929 Prof. Jess H. Jackson, 224 Palace Green, Williamsburg, Va. (English, College of William and Mary)
- FM Prof. Cary F. Jacob, 10 West St., Northampton, Mass. (Spoken English, Smith Coll.)
- 1928 Dr. Melville Jacobs, Univ. of Washington, Seattle, Wash. (Anthropology)
- 1929 Prof. Russell P. Jameson, Oberlin College, Oberlin, Ohio. (Romance Langs.)
- 1928 Prof. T. Atkinson Jenkins, 5411 Greenwood Av., Chicago, Ill. (History of the French Lang., Univ. of Chicago)
- 1929 Dr. E. J. Johns, address unknown.
- 1929 Prof. Edwin Lee Johnson, College Hall, Vanderbilt Univ., Nashville, Tenn. (Latin and Greek)
- 1929 Prof. Marguerite E. Jones, Hunter College, Park Av. and 68th St., New York City. (Speech)

- FM Prof. May Lansfield Keller, Westhampton College, Univ. of Richmond, Va. (English)
- FM Miss Ruth M. Keller, Warburton House, 20th and Sansom Sts., Philadelphia, Pa.
- 1925 Prof. G. D. Kellogg, Union College, Schenectady, N. Y. (Latin)
- FM Prof. Robert J. Kellogg, 913 W. 6th St., Lawrence, Kansas.
- FM Prof. John M. Kelso, Wesley Collegiate Institute, Dover, Del. (Classical Langs.)
- 1928 Prof. Hayward Keniston, Univ. of Chicago, Chicago, Ill. (Spanish Lang.)
- FM Prof. Arthur G. Kennedy, 435 Coleridge Av., Palo Alto, Calif. (English Phil., Stanford Univ.)
- SC Prof. Roland G. Kent, Univ. of Pennsylvania, Philadelphia, Pa. (Comparative Phil.) Life Member, 1927.
- 1929 Prof. John S. Kenyon, Hiram College, Hiram, Ohio. (English)
- 1930 Mr. John Kepke, 224 Hancock St., Brooklyn, N. Y. (Germanic Langs.)
- FM Mr. J. Alexander Kerns, Washington Sq. Coll., New York Univ., New York City. (Classics)
- 1927 Prof. Watson Kirkconnell, Wesley College, Univ. of Manitoba, Winnipeg, Canada. (English)
- FM Mr. Eugene Klein, 200 S. 13th St., Philadelphia, Pa. (Philatelist; collector of Oriental manuscripts)
- 1931 Miss Dorothy E. Kleinfelter, 417 East Main St., Palmyra, Pa. (Latin, Palmyra High School)
- 1927 Prof. James A. Kleist, St. Louis Univ., Grand and Pine Blvds., St. Louis, Mo. (Classical Langs.)
- FM Prof. Charles Knapp, 1737 Sedgwick Av., New York City. (Greek and Latin, Columbia Univ.)
- 1926 Mr. T. A. Knott, 328 Forest Park Av., Springfield, Mass. (General Editor of Webster's New International Dictionary)
- 1929 Dr. Richard Knowles, Great Neck Preparatory School, Great Neck, Long Island, N. Y.
- FM Prof. Selma S. König, Box 123, Peru, Neb.
- 1932 Mr. William C. Korfmacher, 4548 Alice Ave., St. Louis, Mo. (Classical Langs., St. Louis Univ.)
- FM Prof. Franklin B. Krauss, 345 W. Beaver Ave., State College, Pa. (Latin, Penna. State Coll.)
- 1930 Mr. Joseph G. Kresch, 2116 Morris Ave., New York City.
- SC Prof. A. L. Kroeber, Univ. of California, Berkeley, Calif. (Anthropology)

- 1926 Prof. Samuel Kroesch, Univ. of Minnesota, Minneapolis, Minn. (German)
- 1932 Miss Katharine E. Kuemmerle, 91 Vernon Ave., Mt. Vernon, N. Y. (Graduate student in Linguistics, Yale Univ.)
- FM Prof. Hans Kurath, Brown Univ., Providence, R. I. (German; Director of Linguistic Atlas)
- FM Prof. A. G. Laird, Univ. of Wisconsin, Madison, Wis. (Greek)
- 1931 Dr. George S. Lane, 6118 Greenwood Ave., Chicago, Ill. (Comp. Phil., Univ. of Chicago)
- 1927 Prof. Emeritus Henry R. Lang, Box 176, Yale Sta., New Haven, Conn. (Romance Langs. and Lits., Yale Univ.)
- FM Prof. Philippe de La Rochelle, Columbia Univ., New York City. (French)
- 1928 Prof. Henning Larsen, Woodlawn Apts., Iowa City, Iowa. (English, State Univ. of Iowa)
- FM Dr. Berthold Laufer, Field Museum of Natural History, Chicago, Ill. (Eastern Asiatic Langs.)
- 1932 Mr. Omer M. Lebel, City College, Convent Ave. and 139th St., New York City. (Romance Langs.)
- 1931 Mr. Harold Lenz, 1944 Loring Place, Bronx, New York City. (German, New York University)
- 1929 Prof. Harry J. Leon, Univ. of Texas, Austin, Tex. (Classical Langs.)
- 1928 Prof. W. Leopold, Lunt Library, Evanston, Ill. (German, Northwestern Univ.)
- 1928 Mr. Edward Y. Lindsay, 57 Mansfield Ave., Burlington, Vt. (Latin, Univ. of Vermont)
- 1927 Prof. Charles E. Little, Peabody College, Nashville, Tenn. (Latin)
- FM Mrs. Robert M. Littlejohn (Rebecca Bolling), 23 E. 67th St., New York City. Benefactor, 1927.
- 1926 Prof. Wesley R. Long, Tarkio College, Tarkio, Mo. (Modern Langs.)
- SC Prof. C. M. Lotspeich, Univ. of Cincinnati, Cincinnati, Ohio. (Comparative and English Phil.)
- 1930 Mrs. Cecyl B. Lovejoy, Westchester School of Drama, White Plains, N. Y.
- FM Prof. Clarence G. Lowe, The Gennadios Library, Athens, Greece. (Classics)
- 1932 Mr. Guy S. Lowman, care of Linguistic Atlas, Brown Univ., Providence, R. I. (Field-worker, Linguistic Atlas)

- FM Prof. Wm. F. Luebke, Univ. of Denver, Denver, Colo. (English)
- 1927 Prof. Max A. Luria, 497 Kosciusko St., Brooklyn, N. Y. (Spanish, Coll. of the City of New York)
- 1929 Dr. David I. Macht, care of Hynson, Westcott & Dunning, Baltimore, Md. (Pharmacological Research; also Lecturer in Clinical Pharmacology, Johns Hopkins Univ.)
- 1928 Prof. Grace Harriet Macurdy, Vassar College, Poughkeepsie, N. Y. (Greek)
- 1927 Prof. Ralph V. D. Magoffin, New York Univ., University Heights, New York City. (Classics)
- 1931 Monsieur Adrien Maisonneuve, 5 rue de Tournon, Paris VI, France. (Dealer in Oriental and linguistic books)
- FM Prof. Gaston Louis Malécot, Washington and Jefferson College, Washington, Pa. (Romance Langs.)
- FM Prof. Kemp Malone, Johns Hopkins Univ., Baltimore, Md. (English)
- SC Prof. John M. Manly, Univ. of Chicago, Chicago, Ill. (English)
- FM Prof. Clarence A. Manning, 25 East View Av., Pleasantville, N. Y. (Slavonic Langs., Columbia Univ.)
- 1932 Dr. Albert H. Marckwardt, Univ. of Michigan, Ann Arbor, Mich. (English)
- FM Dr. Ralph Marcus, 511 West 113th St., New York City. (Bible and Hellenistic Judaism, Jewish Institute of Religion; Lecturer on Semitic Langs., Columbia Univ.)
- 1931 Miss Mabel F. Martin, care of G. and C. Merriam Co., 10 Broadway, Springfield, Mass. (On editorial staff of Webster's Dictionary)
- FM Prof. Nicholas N. Martinovitch, 450 West 152nd St., New York City. (Slavonic and Oriental Langs.)
- 1931 Mr. Geoffrey T. Mason, Sewickley Academy, Sewickley, Pa. (Latin)
- 1926 Dr. J. Alden Mason, Univ. of Penna. Museum, Philadelphia, Pa. (Curator, American Section)
- 1930 Miss Marie K. Mason, 1170 E. Broad St., Columbus, Ohio. (Rhythm and Acoustics, Ohio State School for the Deaf)
- FM Prof. E. K. Maxfield, 311 E. Beau St., Washington, Pa. (English, Washington and Jefferson Coll.)
- 1931 Prof. H. A. Maynard, International College, Izmir, Turkey. (English)
- 1931 Dr. Barbara P. McCarthy, Wellesley College, Wellesley, Mass. (Greek)

- 1932 Rev. John P. McCormick, S.S., Caldwell Hall, Catholic Univ., Washington, D. C. (Prof. of Homiletics, Sulpician Seminary; graduate student in Greek and Latin)
- FM Prof. Nelson G. McCrea, Columbia Univ., New York City. (Latin)
- 1927 Prof. Ida Kruse McFarlane, 1473 Gilpin St., Denver, Colo. (English Lit., Univ. of Denver)
- 1929 Mr. C. M. McLean, 3 Chestnut St., Binghamton, N. Y.
- 1926 Mr. O. W. McMillen, Director of Canton Union Language School, Canton, China.
- 1931 Prof. Hermann Meier, Drew Univ., Madison, N. J. (German)
- FM Prof. Clarence W. Mendell, Yale Univ., New Haven, Conn. (Latin Lang. and Lit.)
- 1926 Prof. Edgar A. Menk, Ball State Teachers College, Muncie, Ind. (Latin; Head of Foreign Lang. Dept.)
- FM Prof. Robert J. Menner, 1827 Yale Sta., New Haven, Conn. (English, Yale Univ.)
- FM Prof. E. H. Mensel, 146 Elm St., Northampton, Mass. (Germanic Langs. and Lits., Smith Coll.)
- FM Prof. Albert Douglas Menut, Syracuse Univ., Syracuse, N. Y. (Romance Langs.)
- 1931 Dr. Herbert D. Meritt, Vernon, N. Y. (Old English glosses)
- 1925 Prof. W. S. Messer, Dartmouth Coll., Hanover, N. H. (Latin)
- 1931 Prof. Michael Metlen, Loyola Univ., Rogers Park Campus, Chicago, Ill. (German)
- 1929 Prof. F. Mezger, Cartref, Bryn Mawr, Pa. (German, Bryn Mawr College)
- SC Prof. Truman Michelson, Smithsonian Institution, Washington, D. C. (Ethnology, George Washington Univ.; Ethnologist, Smithsonian Inst.)
- 1929 Mr. Antonio A. Micocci, 13 Fairview Ave., Wyncote, Pa. (Latin)
- 1932 Prof. Anna Irene Miller, Goucher College, Baltimore, Md.
- FM Prof. C. W. E. Miller, Johns Hopkins Univ., Baltimore, Md. (Greek)
- 1931 Mr. Edmund E. Miller, Univ. of Delaware, Newark, Del.
- 1927 Prof. B. S. Monroe, Cornell Univ., Ithaca, N. Y. (English)
- 1932 Prof. Olin H. Moore, Ohio State Univ., Columbus, Ohio. (Romance Langs.)
- FM Prof. Samuel Moore, 1503 Cambridge Road, Ann Arbor, Mich. (English, Univ. of Michigan)

- 1927 F. Corlies Morgan, Esq., 8625 Montgomery Av., Chestnut Hill, Philadelphia, Pa. (Treasurer of the Univ. of Pennsylvania)
- 1927 Mr. Dave H. Morris, 19 E. 70th St., New York City. (Lawyer)
- FM Mrs. Dave Hennen Morris, 19 E. 70th St., New York City. (International Auxiliary Language)
- 1931 Mr. Charles L. Mudge, 6 Orange Ave., Cranford, N. J. (Graduate student in Linguistics, Yale Univ.)
- FM Prof. Henri F. Muller, Barnard College, New York City. (Romance Phil.)
- FM Prof. Otto Müller, Apt. 10 B, 490 West End Ave., New York City. (Romance Langs., City College)
- 1931 Mrs. Mable Grant Murphy, 1647 35th St. N. W., Washington, D. C. (Graduate student at George Washington Univ.)
- 1931 Prof. Fumio Nakajima, Imperial University of Keijo, Chosen, Japan. (English)
- FM Prof. Edward W. Nichols, Dalhousie Univ., Halifax, Nova Scotia. (Classics)
- 1925 Prof. Wm. A. Nitze, 1220 E. 56th St., Chicago, Ill. (Romance Langs., Univ. of Chicago)
- 1932 Prof. O. M. Norlie, 132 St. James Place, Brooklyn, N. Y. (Director of the Graduate School, Hartwick Seminary)
- 1926 Prof. Clark S. Northup, 407 Elmwood Av., Ithaca, N. Y. (English, Cornell Univ.)
- 1926 Prof. G. R. Noyes, 1486 Greenwood Terrace, Berkeley, Calif. (Slavonic Langs., Univ. of California)
- 1925 Prof. Alois Richard Nykl, Oriental Institute, Univ. of Chicago, Chicago, Ill. (Romance Langs., Arabic, General Linguistics)
- FM Prof. Merle M. Odgers, Univ. of Pennsylvania, Philadelphia, Pa. (Latin)
- FM Dr. Felix von Oefele, 326 E. 58th St., New York City. (Medical Chemist)
- FM Dr. Charles J. Ogden, 628 W. 114th St., New York City. (Indo-Iranian)
- 1929 C. K. Ogden, Esq., Royal Societies Club, St. James's St., London S. W. 1, England.
- 1925 Prof. M. B. Ogle, Ohio State Univ., Columbus, Ohio. (Classical Langs.)
- 1925 Prof. W. A. Oldfather, Univ. of Illinois, Urbana, Ill. (Classical Langs.)
- FM Prof. Samuel Grant Oliphant, 520 Stewart Av., Grove City, Pa. (Greek and Sanskrit, Grove City College)

- FM John Rathbone Oliver, M.D., Latrobe Apts., Read and Charles
Sts., Baltimore, Md. (Physician, Psychiatrist, Criminologist)
- 1931 Dr. B. J. Olli, College of the City of New York, 139th St. and
Convent Ave., New York City. (German)
- 1932 Prof. Lewis A. Ondis, Ohio Univ., Athens, Ohio. (Romance
Langs.)
- 1929 Prof. Anders Orbeck, Univ. of Rochester, Rochester, N. Y.
(English)
- 1931 Prof. Philip M. Palmer, 3033 Clifton Ave., Cincinnati, Ohio.
(German, Univ. of Cincinnati)
- FM Prof. Roscoe E. Parker, Univ. of Tennessee, Knoxville, Tenn.
(English)
- FM Prof. C. E. Parmenter, Univ. of Chicago, Chicago, Ill. (Ro-
mance Langs.)
- FM Dr. John J. Parry, 805 W. Iowa St., Urbana, Ill. (English,
Univ. of Illinois)
- 1927 Dr. Milman Parry, 14 Shepard St., Cambridge, Mass. (Greek
and Latin, Harvard Univ.)
- FM Dr. Elsie Clews Parsons, Harrison, N. Y. (Anthropologist)
- 1925 Prof. Clarence Paschall, Univ. of California, Berkeley, Calif.
(German)
- 1930 Mr. Edwin John Pattee, Univ. of Louisville, Louisville, Ky.
(French and German)
- 1929 Mr. Mario A. Pei, 35 Hamilton Place, Apt. 702, New York City.
(Romance Langs., Coll. of the City of New York)
- FM Mr. Wallace W. Perkins, 937 Main St., Woburn, Mass. (French,
Butler Coll., Indianapolis)
- FM Rev. T. C. Petersen, Catholic Univ. of America, Washington,
D. C. (Semitics)
- SC Prof. Walter Petersen, Univ. of Chicago, Chicago, Ill. (Comp.
Phil.)
- 1930 Prof. Frederick W. Peterson, Foster Road, Ann Arbor, Mich.
(Rhetoric, Univ. of Michigan)
- 1931 Prof. Clyde Pharr, Vanderbilt Univ., Nashville, Tenn. (Greek
and Latin)
- 1929 John Phelps, Esq., 3 E. Lexington St., Baltimore, Md. (Law-
yer; English Lang.)
- 1925 Robert Morris Pierce, 15 W. 18th St., New York City. (Author)
- 1931 Prof. Dr. J. L. Pierson Jr., Tafelbergweg 22, Laren (N.-H.),
Holland. (Japanese Lang. and Lit., Univ. of Utrecht)

- FM Dr. George A. Plimpton, 70 Fifth Av., New York City. (Publisher)
- 1928 Mr. Horace I. Poleman, 402 Green Lane, Roxborough, Philadelphia, Pa. (Graduate student in Sanskrit, Univ. of Penna.)
- 1929 Miss Mabel H. Pollitt, address unknown.
- 1930 Mrs. Helen P. Pond, 183 Lawrence St., New Haven, Conn.
- 1930 Mrs. Helen Pope, Brooklyn College, Brooklyn, N. Y. (Greek and Latin)
- 1931 Mr. W. E. Porter, 324 Kingston Ave., Charlotte, N. C.
- 1931 Prof. Allen W. Porterfield, West Virginia Univ., Morgantown, W. Va. (German)
- 1932 Mr. James R. Poultney, 505 Park Ave., Baltimore, Md. (Greek, Johns Hopkins Univ.)
- FM Prof. Louise Pound, Univ. of Nebraska, Lincoln, Neb. (English)
- 1928 Mr. H. M. Poynter, Phelps House, Andover, Mass. (Latin, Andover Acad.)
- FM Prof. Henrietta Prentiss, Hunter College, New York City. (Speech and Dramatics)
- 1927 Prof. Francis R. Preveden, 7927 Merrill Ave., Windsor Park Sta., Chicago, Ill. (DePaul Univ.)
- 1929 Prof. Hereward T. Price, Univ. of Michigan, Ann Arbor, Mich. (English)
- 1926 Prof. Lester M. Prindle, 380 Maple St., Burlington, Vt. (Latin, Univ. of Vermont)
- 1932 Miss Edith M. Proctor, 4128 Girard Ave., Philadelphia, Pa. (Latin, Stetson Junior High School)
- SC Prof. Eduard Prokosch, Yale Univ., New Haven, Conn. (Germanic Langs.)
- 1925 Prof. Lawrence Pumpelly, 604 E. Buffalo St., Ithaca, N. Y. (Romance Langs., Cornell Univ.)
- 1932 Rev. Joseph A. M. Quigley, St. Charles Seminary, Overbrook, Philadelphia, Pa. (Prof. of Mathematics)
- 1932 Mrs. Carl Rach, 442 Van Duzer St., Stapleton, Staten Island, New York City. (Modern Langs.)
- 1928 Prof. Paul Radin, care of Prof. A. L. Kroeber, Univ. of California, Berkeley, Calif. (Anthropology)
- 1929 Mr. Joseph J. Raymond, Lietuvos Universitetas, Kaunas, Lithuania. (Lithuanian)
- 1926 Mr. Allen Walker Read, Hitchcock Hall, Univ. of Chicago, Chicago, Ill. (English)

- 1926 Prof. Homer F. Rebert, Amherst Coll., Amherst, Mass.
(Latin)
- 1932 Mrs. Thyra C. Rees, 23 Beech Ave., Aldan, Pa. (Latin, Overbrook High School, Phila.)
- FM Prof. Nathaniel Julius Reich, P. O. Box 337, Philadelphia, Pa.
(Egyptology, Dropsie Col.)
- 1930 Prof. Walter A. Reichart, 811 Berkshire Road, Ann Arbor, Mich.
(German, Univ. of Michigan)
- FM Prof. Arthur F. J. Remy, Columbia Univ., New York City.
(Germanic Phil.)
- 1928 Prof. Karl Reuning, Swarthmore Coll., Swarthmore, Pa. (German)
- 1931 Mr. Cassil Reynard, Hiram College, Hiram, Ohio.
- 1932 Prof. O. P. Rhyne, Clemson College, South Carolina. (Modern Langs.)
- 1928 Dr. Allan Lake Rice, 4217 Osage Av., Philadelphia, Pa. (German, Princeton Univ.)
- 1928 Prof. Carlton C. Rice, Catawba Coll., Salisbury, N. C. (Romance Langs.)
- FM Mrs. Edward Norris Rich, Jr. (Charlotte Townsend Littlejohn),
5313 Springlake Way, Baltimore, Md. Benefactor, 1927.
- 1926 Prof. Henry Brush Richardson, 50 Pendleton St., New Haven, Conn. (French, Yale Univ.)
- 1925 Prof. Ernst Riess, Hunter Col., New York City. (Classical Langs.)
- 1925 Prof. D. M. Robinson, Johns Hopkins Univ., Baltimore, Md.
(Archaeology, Epigraphy, Greek Lit.)
- 1926 Prof. Fred. N. Robinson, Longfellow Park, Cambridge, Mass.
(English, Harvard Univ.)
- 1932 Prof. Leo Lawrence Rockwell, Bucknell Univ., Lewisburg, Pa.
(Germanic Langs.)
- 1929 Prof. Edwin C. Roedder, 700 Riverside Drive, New York City.
(Germanic Lang. and Lit., City College)
- 1928 Mr. Harold Rosen, 5610 N. 10th St., Philadelphia, Pa. (Grad. student in IE Phil., Univ. of Pa.)
- FM Prof. S. L. Millard Rosenberg, Univ. of California at Los Angeles,
Los Angeles, Calif. (Spanish)
- 1929 Mr. Lessing J. Rosenwald, care of Sears Roebuck & Co., Roosevelt Blvd., Philadelphia, Pa.
- 1932 Alan S. C. Ross, Esq., 7 College Cloisters, Hereford, England.
(Asst. Lecturer on the English Lang., Univ. of Leeds)

- 1931 Miss Helen R. Rowland, 4545 Ritchie St., Philadelphia, Pa.
 FM Prof. G. Oscar Russell, Ohio State Univ., Columbus, Ohio.
 (Romance Langs.)
- 1927 Prof. Leo Erval Saidla, 95 Livingston St., Brooklyn, N. Y.
 (English, Brooklyn Polytechnic Inst.)
- 1931 Mr. Shizuka Saitō, Fukui Chūgakkō, Fukui, Japan. (English)
 FM Miss Else M. Saleski, Canton, N. Y.
- 1928 Dr. Mary Agnes Saleski, St. Lawrence Univ., Canton, N. Y.
 (Modern Langs.)
 FM Prof. R. E. Saleski, Bethany College, Bethany, W. Va. (German)
- SC Prof. Edward Sapir, 426 Prospect St., New Haven, Conn. (Anthropology and General Linguistics, Yale Univ.)
- 1928 Prof. John A. Sawhill, State Teachers College, Harrisonburg, Va. (Latin)
- 1931 Mr. Lauriston L. Scaife, C26 Dunster House, Cambridge, Mass.
 (Graduate student in Classics and Comp. Phil., Harvard Univ.)
- 1931 Prof. Margaret Schlauch, New York Univ., Washington Square East, New York City. (English)
 FM Prof. Nathaniel Schmidt, Cornell Univ., Ithaca, N. Y. (Semitic Langs. and Oriental History)
- FM Prof. Alexander H. Schutz, Ohio State Univ., Columbus, Ohio.
 (Romance Langs.)
- FM Prof. H. F. Scott, Ohio Univ., Athens, Ohio. (Classical Langs.)
- 1928 Prof. Kenneth Scott, Western Reserve Univ., Sta. E, Cleveland, Ohio. (Latin and Greek)
 FM Prof. Robert D. Scott, Univ. of Nebraska, Lincoln, Neb. (English Dramatic Lit.)
- 1926 Prof. Edward H. Sehart, 1844 Columbia Road, Washington, D. C. (German, George Washington Univ.)
- 1931 Mr. Samuel Seligman, 3246 Le Moyne St., Chicago, Ill. (Teacher, Chicago Public Schools).
 FM Prof. Ovid R. Sellers, 846 Chalmers Place, Chicago, Ill. (Hebrew and Old Testament, McCormick Theological Seminary)
- 1930 Prof. Dr. Carl Selmer, Hunter College, 68th and Park Ave., New York City. (German)
 FM Prof. W. T. Semple, 315 Pike St., Cincinnati, Ohio. (Classics, Univ. of Cincinnati)
- 1931 Prof. Alfred Senn, Univ. of Wisconsin, Madison, Wis. (Germanic Phil. and Indo-European Linguistics)

- 1929 Prof. E. B. Setzler, Newberry College, Newberry, S. C. (English)
FM Prof. J. E. Shaw, Univ. of Toronto, Toronto, Canada. (Italian and Spanish)
FM Prof. Percy V. D. Shelly, Univ. of Pennsylvania, Philadelphia, Pa. (English)
FM Prof. William P. Shepard, Hamilton Coll., Clinton, N. Y. (Romance Langs.)
FM Mr. George W. H. Shield, 1537 W. 46th St., Los Angeles, Calif. (Supervisor of Modern Langs., City Schools)
FM Prof. Daniel B. Shumway, Univ. of Pennsylvania, Philadelphia, Pa. (German Phil.)
1931 Sister M. Hyacinth, Bethlehem Catholic High School, 4th and Webster Sts., Bethlehem, Pa. (Principal; English, History)
1931 Sister M. St. Francis, Wellesley St., Weston, Mass. (French, Regis College)
1925 Prof. George William Small, Univ. of Maine, Orono, Me. (English)
1929 Mr. Leon P. Smith, Jr., Univ. of Chicago, Chicago, Ill. (Romance Langs.)
FM Dr. Maria W. Smith, The Cheston, 38th and Chestnut Sts., Philadelphia, Pa. (Latin, Temple Univ.)
FM Prof. Antonio G. Solalinde, Univ. of Wisconsin, Madison, Wis. (Romance Langs.)
FM Prof. Frank G. Speck, Univ. of Pennsylvania, Philadelphia, Pa. (Anthropology)
FM Prof. E. A. Speiser, Univ. of Pennsylvania, Philadelphia, Pa. (Semitics)
FM Arthur R. Spencer, Esq., Villa Nova, Pa.
1925 Miss Esther Jean Spencer, 219 East Avenue 31, Los Angeles, Calif. (Latin, Lincoln High School, Los Angeles)
1930 Mr. Henry F. Standerwick, 310 Convent Ave., New York City. (Classical Langs., College of the City of New York)
FM Prof. Taylor Starek, 32 Bowdoin St., Cambridge, Mass. (German, Harvard Univ.)
FM Prof. Guido H. Stempel, 723 S. Park Av., Bloomington, Ind. (Comparative Phil., Indiana Univ.)
1931 Prof. R. H. Stetson, 131 Forest St., Oberlin, Ohio.
1928 Mr. J. Frank Stimson, Boite 59, Papeete, Tahiti, French Oceania. (Research Asst., Ethnology and Linguistics, Bishop Museum, Honolulu)

- FM Prof. Harold S. Stine, 242 E. Durham St., Philadelphia, Pa.
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- 1928 Mr. Arthur C. Streufert, 1248 Marshall Av., St. Paul, Minn.
- 1932 Dr. George K. Strodach, 6906 Henley St., Mt. Airy, Philadelphia,
Pa. (Classics)
- 1932 Prof. F. W. Strothmann, Stanford University, Calif. (German)
- 1930 Miss Winifred Sturdevant, Barnard Coll., Columbia Univ.,
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- 1926 Prof. Cony Sturgis, Box 6, Oberlin, Ohio. (Spanish, Oberlin
Coll.)
- FM Prof. Albert Morey Sturtevant, 924 Louisiana St., Lawrence,
Kans. (Germanic Langs. and Lits., Univ. of Kansas)
- SC Prof. Edgar Howard Sturtevant, Yale Graduate School, New
Haven, Conn. (Linguistics, Yale Univ.)
- 1931 Mr. Morris Swadesh, Apt. 610, 100 Howe St., New Haven, Conn.
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- SC Dr. John R. Swanton, Smithsonian Institution, Washington,
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- FM Prof. Helen H. Tanzer, 208 E. 15th St., New York City. (Clas-
sics, Hunter College)
- 1930 Mr. L. Leo Taub, 945 West End Ave., New York City.
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- 1932 Prof. Lily Ross Taylor, Bryn Mawr College, Bryn Mawr, Pa.
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- 1929 Prof. Pauline Taylor, Butler Hall, 119th St. and Morningside
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- FM Mr. Nainsinh Thakar, 5719 Eighteenth Ave., Brooklyn, N. Y.,
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- 1932 Dr. Russell Thomas, 716 South Prairie Ave., Sioux Falls, S. D.
- 1932 Prof. Edward L. Thorndyke, Teachers College, Columbia Univ.,
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- 1930 Prof. Oliver Towles, Washington Square Coll., New York
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- 1929 Prof. Alfred M. Tozzer, 7 Bryant St., Cambridge, Mass. (An-
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- 1931 Mr. George L. Trager, 133 Osborne Terrace, Newark, N. J.
(Research Associate, International Auxiliary Language Assn.)
- 1929 Prof. R. Whitney Tucker, Box 137, Selinsgrove, Pa. (Latin,
Susquehanna Univ.)

- 1928 Prof. Frederick Tupper, Univ. of Vermont, Burlington, Vt.
(English)
- FM Prof. Milton Haight Turk, 40 Park Place, Geneva, N. Y. (English, Hobart Col.)
- 1928 Prof. Pauline Turnbull, Westhampton College, University of Richmond P. O., Va. (Latin)
- 1931 Prof. Lorenzo D. Turner, Fisk Univ., Nashville, Tenn. (English)
- FM Edwin H. Tuttle, The Gelhave, 405 Tenth St. N. E., Washington, D. C.; summer address, Brooksvale Road, Mount Carmel, Conn. (Writer)
- 1930 Prof. W. Freeman Twaddell, Bascom Hall, Madison, Wisc. (German, Univ. of Wisconsin)
- 1930 Mrs. Mary Ada Underhill, 316 B Doniphan Ave., Fort Leavenworth, Kans. (Slavic Langs.)
- FM Prof. Axel Johan Uppvall, Univ. of Pennsylvania, Philadelphia, Pa. (Scandinavian Langs.)
- 1929 Miss Gertrude van Adestine, 150 Atkinson Av., Detroit, Mich. (Supervising Principal, Detroit Day School for the Deaf)
- FM Prof. Harry B. Van Deventer, Univ. of Pennsylvania, Philadelphia, Pa. (Latin)
- 1925 Prof. H. H. Vaughan, Univ. of California, Berkeley, Calif. (Italian)
- 1931 Prof. Harry V. Velten, State College of Washington, Pullman, Wash. (Modern Langs.)
- 1927 Prof. Ernst Voss, 175 Virginia Terrace, Madison, Wis. (German Philology, Univ. of Wisconsin)
- 1932 Prof. Guy R. Vowles, Davidson College, Davidson, N. C. (German)
- 1928 Mr. Guenter K. Wagner, Heinrich-Barthstr. 34 (bei Foeste), Hamburg 13, Germany. (Anthropology)
- 1931 Dr. Arnold Walther, 5405 Woodlawn Ave., Chicago, Ill. (Semitics, Accadian, Hittite; Oriental Institute, Univ. of Chicago)
- 1926 Prof. John A. Walz, 42 Garden St., Cambridge, Mass. (German Lang. and Lit., Harvard Univ.)
- FM Mr. James R. Ware, 17 Boylston Hall, Cambridge, Mass. (Fellow in Chinese in the Harvard-Yenching Institute)
- 1927 Miss Florence Waterman, The Winsor School, Pilgrim Road, Boston, Mass. (Greek and Latin)
- 1927 Prof. Camille E. Werling, Univ. of Denver, Colo. (Romance Langs.)

- 1929 Prof. T. G. Wesenberg, Butler College, Indianapolis, Ind. (Romance Langs.)
- FM Prof. M. N. Wetmore, Williams College, Williamstown, Mass. (Latin)
- 1927 Prof. Joshua Whatmough, 791 Widener Library, Cambridge, Mass. (Comp. Philology, Harvard Univ.)
- 1930 Mr. A. R. Wheelock, Silver Bay on Lake George, N. Y.
- 1929 Mr. Benjamin L. Whorf, 320 Wolcott Hill Road, Wethersfield, Conn. (Nahuatl Langs. and General Linguistics)
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- 1929 Prof. Rudolph Willard, 1875 Yale Sta., New Haven, Conn. (English Lit., Yale Univ.)
- FM Prof. Charles Allyn Williams, 801 W. Nevada St., Urbana, Ill. (German, Univ. of Illinois)
- 1927 Prof. Edwin B. Williams, College Hall, Univ. of Penna., Philadelphia, Pa. (Romanic Langs.)
- FM Prof. Edward J. Williamson, 40 Park Place, Geneva, N. Y. (Modern Langs., Hobart Coll.)
- 1930 Prof. Rachel Wilson, Hollins College, Hollins, Va. (French)
- 1926 Prof. Clark Wissler, Institute of Human Relations, New Haven, Conn. (Anthropology and Psychology, Yale Univ.)
- 1926 Mr. H. Rey Wolf, 16 School Lane, Ardmore, Pa. (Latin, S. Phila. High School)
- 1928 Stuart N. Wolfenden, Esq., Drawer P-1, Beverly Hills, Calif. (Tibeto-Burman Langs.)
- 1931 Prof. Dael L. Wolfe, Univ. of Mississippi, University, Miss. (Psychology)
- FM Prof. Emeritus Francis A. Wood, La Jolla, Calif. (Germanic Phil., Univ. of Chicago)
- 1928 Prof. Frederic T. Wood, Box 1162, University, Va. (German, Univ. of Virginia)
- 1930 Miss Kathryn L. Wood, 241 Merion Road, Merion, Pa. (Grad. student in French, Bryn Mawr Coll.)
- FM Prof. Willis P. Woodman, 808 Main St., Geneva, N. Y. (Latin, Hobart Coll.)
- FM Prof. James Houghton Woods, 29 Follen St., Cambridge, Mass. (Philosophy, Harvard Univ.)

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MORE HITTITE WORDS

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[Indo-European etymological notes on the Hittite words *kutrus*, *akugallit*, *kunkunuzzi*, *kunk-*, *pupus*, *suppala-*, *wantai-*, *irmas*, *ipulli-*, *palwas*.]

1. The word *kutrus*¹ 'witness' is represented also in the secondary formations *kutruwatar* 'the giving of evidence'², *kutruwā(i)-* 'to cause witnesses to testify'(?)³, and the preterite form *kutruwahun* 'made (one) a witness.'⁴ Abstracts in *-tar* (gen. *-nnas* < **-tnas*) are frequently formed in Hittite from nominal stems, e.g. *parkuwatar* 'height': *parkus* 'high', *irmatar* 'illness': *irmas* 'ill', *antuhsatar* 'virtus': *antuhsas* 'man.' Examples of denominative verbs in *-ā(i)* are: *hu(w)es(u)wā(i)-* 'be alive': *hu(w)esus* 'alive', *dammeshā(i)-* 'harm, punish': *dam(m)eshas* 'harm, punishment', *happarā(i)-* 'give out, sell': *happar* 'business transaction.'

IE words for 'witness', 'arbiter', 'judge', 'plaintiff', 'defendant' vary from language to language, though the Italo-Celtic and Indo-Iranian branches show a certain community in technical terms of law and religion. Even the two principals are not consistently designated, but their importance is indicated by the Latin legal term *altercatio*, which describes the pleading of the parties of the first and second part.

Other figures in the legal process are naturally the judge or arbiter, and the supporters or witnesses of the plaintiff and defendant. In Latin the witness is known as the 'third party' (*testis*), whether the word is derived from **tri-sto/i-* (: **stā-*)⁵ or is a special ordinal form of the numeral *trēs* (cf. OIr *tress* 'third')⁶. The comment of Ernout-Meillet is 'il faut penser à d'anciens usages où chacune des parties est soutenue par des "tiers"'. But if each party has his supporter, the idea of 'third' loses its force, as there are four persons now concerned.

¹ Sommer, BoSt 7.14.2.10.76; Götze, Kf 1.178.

² Götze, Madd. 95, Kf 1.178.

³ Hrozný, CH. 94.7.10; Götze, Madd. 82.

⁴ Friedrich, Vert. 2.101.

⁵ So Solmsen, Muller, Walde.

⁶ So Skutsch, Walde, Ernout-Meillet.

According to a Russian usage, the arbiter or judge is technically the third party present. The numeral *tretij* 'third' is used also in the sense of 'arbiter, judge', and the longer phrase *tretejskij sud'ya* has a similar meaning. The English use of 'umpire' (older *nompere*, Fr. *nompair*) suggests a similar feeling for the arbiter as the 'odd man' or third party. Latin appears to ignore the judge's presence, or else to regard him as superior to and apart from the litigants who appear before him. If the judge is considered as a major party in the case, he will normally be the *third* person present, and the witness, when called, will obviously be the *fourth*. Or, if the judge is excluded from the reckoning, the supporters or witnesses for plaintiff and defendant will be the third and fourth parties concerned.⁷

I propose to derive Hitt. *kutrus* from IH (and IE) **q^utru-*, a variant stem-form of the numeral **q^uet̥yores* 'four', or from its reduced form **q^u(e)tr-* treated as a *u*-stem substantive. The numeral 'four' has not been found written out in Hittite, but would appear as **ku(w)it-* with the full grade of the first syllable. We may take *kut-* as the nil-grade of this syllable (cf. *akuttaras* 'drinker': *akuwakuwas* 'frog, toad', and *us(sa)niyazi* 'he sells': *wāsi* 'he buys').

The second syllable may also be nil-grade before the stem-suffix *u*, (cf. Lat. *quadrus*, *quadri-*, *quadr-ā-* in addition to *quadru-*), but more likely the form represents IH **q^u(e)tru-*, **q^utru-*, as found in Grk. *τρυφάλεια* 'helmet with four *phaloi*' (cf. *τετράφαλος*)⁸; also perhaps in Lat. *trucidāre* 'hack in quarters, slaughter'⁹. Latin *quadru-*, Av. *čathru-*, Gaul. *Petru-corius*, *petru-decametos* represent the fuller form **q^uetru-*.

The supporters of the respective participants in a duel or boxing-match are naturally and reasonably known as their 'seconds', but it is difficult to understand why the witnesses of both parties in a law-suit should be known as 'thirds', as the Latin *testis* alone would suggest. The difficulty is removed, however, if we assume, as Sturtevant suggests, that the plaintiff's witness was known as the 'third' party and the defendant's witness as the 'fourth'. A further development likely followed in the separate languages, the selection of one term at the expense of the other. Latin generalized the **tristis*, Hittite the **q^utrus* form.

⁷ This suggestion I owe to Sturtevant.

⁸ This derivation has been accepted by J. Schmidt, Prellwitz, Bechtel, Walde-Pokorny, Boisacq, Ernout-Meillet (s.v. *quattuor*), Muller (p. 372) and others; some explain the Greek form by dissimilation.

⁹ Approved by Walde LEW² and Walde-Pokorny; various other connections are made by Muller, Brugmann, Thurneysen, Ernout-Meillet.

2. The word *akugallit* (inst. sg.) 'wash-basin, water vessel' occurs once in KUB 2.13.1.8 f.: LÚ.Ú.KÁB a-ku-ga-al-li-it AZAG.UD wa-a-tar (9) pí-e-da-i LUGAL-us-za QA.TI.ŠU a-ar-i, 'The Ú.KÁB priest brings water in a silver wash-basin; then (?) the king washes his hands.' The context requires the word to mean a receptacle for water for washing the hands.

The stem of the noun is uncertain, the inst. sg. ending *-it* (*-et*) being widely generalized in Hittite for both vowel and consonant stems. It is regularly used with *a*-stems and frequently with *u*-stems in the form *-awit*, while the more original ending (*-ut*) of *u*-stems (e.g. *ganut*: *genu*- 'knee') indicates that *i*-stems doubtless had the corresponding inst. sg. ending *-it*. The stem, therefore, may be *galla-* or *galli-*.

The word is probably a compound, the first element *aku-* 'water, drink' being the reduced grade of **akwa-* (cf. *akuwakwas* 'frog') which is found in *akuttaras* 'drinker' and the verb *aku-*, *eku-* 'drink' (**ēq#-*: ON. *æger* 'sea'; **ēq#-*: Lat. *aqua*).

The second element evidently means 'bowl, basin', and may be connected with OF (Norm.) *gallon*, OF *jalón* 'large bowl', Fr. *jale* 'bowl', Eng. *gallon*, originally 'large bowl'. These words are probably derived from Lat. *galea* 'helmet' or a simple **galo-*, **gali-* or **galā-* on which *galea* (from **galeiā*) is based. For the formation of *galea* cf. *trabea* 'robe with a *trabs*', *cavea* 'cage': **cavā*, *cavus*, *vinea* 'vineyard; military shelter': *vinum*, *castanea* 'chestnut(tree)': *κάστανον*, etc.

Lat. *galea* is probably a military slang term, alluding to the shape of the helmet, either as a 'bowl, basin' or as an 'object provided with a bowl' or 'bowl-like' (cf. the soldiers' slang 'soup-plate' and the like, used of the 'tin-hat' or steel helmet issued during the Great War). The word is first found in Plautus, and this in itself suggests a popular word such as the Roman troops had put into circulation, probably during the great wars of the third century B.C. Furthermore, the diminutive form *galeola* is found meaning 'a hollow vessel (shaped like a helmet?)'. Though this is used much later than Plautus, it may well be a survival of the earlier force of *galea*, not merely a naming of the vessel from its resemblance to a helmet. The fact that Isidore (Or. 18.14.1) distinguishes *galea* (as made from leather) from *cassis* (as made of metal) has little significance for the early or original value of the words; and *cassis* itself seems to be a borrowed word.

The importation into Italy of pottery and metal ware may have been the cause of the (temporary) disappearance, at least in literary Latin, of a native Italic word for 'bowl' or 'basin'. The words found in Latin

authors to designate the utensil seem regularly to have been borrowed from Greek (*patina*, *patera*, *patella*, *crater*, *calix*, etc.). The existence of the popular word *cuppa* only emphasizes this peculiarity of vocabulary. *Galea* itself has been regarded by some as a borrowing from Grk. γαλέη 'polecat', but there seems to be no reasonable semantic connection.¹⁰

Additional evidence of the similarity felt between 'bowl' and 'helmet' may be traced in the Greek heroic and military use of the helmet as an urn for drawing lots.

The relation of Lat. *galērus* (also *galērum*, *galēra*) 'fur cap' to *galea* is not definitely established.¹¹ *Galea* probably represents **g₁leḡā* (root **gel-*, **gelēḡ-* (?) 'swell; become round, thick'; cf. Lat. *galla* 'gall-apple', from **g₁l-nā*, and *glēba* 'clod'). For the formation cf. Lat. *palea* 'chaff' (< **p₁leḡā*). A close parallel in semantic development is seen in Hom. Grk. πῆληξ 'helmet' (probably from **πηλ₁-*; for the suffix cf. θώρηξ 'breast-plate') from the same root (**pēl-* + *ḡ-*) as Hom. Grk. πῆλλα 'bowl, milk-pail' (< **πηλ₁-ḡa*), Skt. *pālavi* (< **pēlouḡi-*) 'kind of vase', Lat. *pēlvis* 'basin, etc.'

3. The Hittite word for 'diorite', the mineral rock composed largely of feldspar and hornblende, is *kunkunuzzi*,¹² which exhibits the typical Hittite suffix *-uzzi*, used to indicate an instrument or implement. Among other examples are: *ispantuzzi* 'ladle': *sip(p)ant-* 'pour libation'; *warpuzi* 'implement for washing': *warp-* 'wash'; *ishuzzis* 'girdle?': *ishunā-* 'girdle'.¹³

It has long been known that diorite was one of the favorite materials for the fashioning of neolithic weapons. The Encyclopedia Britannica¹⁴ says 'we find polished implements (Neolithic) progressively more elaborate... such as socketed stones with wooden handles... Besides flint the commonest materials are diorite, greenstone', etc. A description of an excavation at Boghazköi in September, 1931,¹⁵ giving an account of discoveries in the Hittite stratum, says 'Eine sehr gebräuchliche Waffe scheint die Keule gewesen zu sein. Wir fanden mehrere runde Kugelkeulen aus Diorit mit sauberer Durchbohrung, ausserdem

¹⁰ V. Ernout-Meillet, *Dict. Ét.* 392; the connection is doubtfully made by Walde, *LEW*² 332.

¹¹ Brugmann, *Ber. der sächs. Ges.* 1900, 411.

¹² Götze, *KlF.* 1.201.

¹³ Sommer-Ehelolf, *BoSt.* 10.18 f.; Sturtevant, *LANGUAGE* 4.230.

¹⁴ 11th edition, 2.582.

¹⁵ Kurt Bittel in *Mitteil. der deutsch. Orient-Gesellschaft*, Nr. 70. p. 21.

auch eine Steinaxt mit Spitz ausgezogenen Enden, eine im vorderen Orient nicht seltene Form. Überhaupt scheint man sich noch vielfach mit Geräten aus Stein benützt zu haben, wie unter anderem auch aus Messerklingen aus Obsidian hervorgeht.' The Hittite people then recognized diorite as a common and appropriate material for weapons.

I suggest, therefore, that the Hittites named the substance after its chief function, and that *kunkunuzzi* means properly 'striking implement, material for weapons.' The root is the familiar IH **g^hhen-*, found in Skt. *hanti*, *ghnanti* 'strike(s)', Grk. ἀπέφατο, ἐπέφνον, φόνος, κτλ., Lat. *-fendo*, ON *gunnr* 'fight', OIr *guin* 'wound', Hitt. *kuen-*, *kun-*, *kuenzi* 'kills'¹⁶.

The meaning of the Hittite word *kunk-* (1 plur. *kunkuwweni*, part. *kunkanza*)¹⁷ is uncertain, being interpreted as 'toss, dandle' or 'adorn'. It may be a half-reduplicated form of *kuen-*, *kun-*, its basic value being 'stroke, pat', with a developed meaning 'dandle, handle', and possibly (as used of an artist, sculptor or potter) 'mould' and so 'adorn'.

The fuller reduplication seen in *kunkunuzzi* may have represented to the Hittite speaker either the repeated blows of the hammer, axe, or other weapon, or the outstanding value of the material for its purpose.¹⁸ But in any case reduplication in noun forms is a common Hittite phenomenon, e.g. in *hūhupal* 'kind of musical instrument', *lulu* 'prosperity', *taptappas* 'nest', *halhalkumaris* 'corner-stone', *purpuras* 'lump', *pippessar* 'gift?': *pes-* 'give', and the like.

4. Hitt. *pupus* 'paramour, lover, adulterer'¹⁹ may be reckoned among this list of Hittite reduplicated noun-forms, on the assumption that it is a reduplication (perhaps intensive) of the root-enlargement **pūs-* seen in Grk. *δπύω*, *δπύω*, *ὤπυσμαι* (perf. pass.) 'take to wife, marry; (*pass.*) become a wife', also in Cret. *δπυστός* (for the ending cf. *ὀρχηστός*, *γραπτός*, *ἀσπαστός*). This verb has been variously interpreted. The following formations, among others, have been ascribed to it: (1) < **δπύσ-ω*, denominative of **δπύσ-* (< **opūms-*),²⁰ (2) as denominative of **ο-πυσ(ο)-*:Skt. *puṣ-* 'support',²¹ (3) as denominative of **ο-πύσ-ι(-ια)*

¹⁶ Also Hitt. *kuenna-*, *kuennes-*, *kuennesk-* 'strike', *kuennianza* 'stricken, slain?'.
¹⁷ Götze, KIF 1.235.

¹⁸ Cf. *akuwakuwas* 'frog' as 'the continuous drinker' or 'the water-animal par excellence', LANGUAGE 6.160.

¹⁹ Hrozný, CH 148.12; Friedrich, OLZ 26.47.

²⁰ Boisacq, Dict. Ét. s.v.

²¹ Brugmann, IF 28.29 ff.

'she who lives with a man', i.e. 'wife', derived from **o-pums-ī* with dissimilatory loss of *-m-*.²²

Hitt. *-pus-*, Grk. *-πῦσ-* are enlargements of the root **peu-*, **pou-* + *a^z* 'swell, grow, be strong'. The group of words referred to this root is varied, and provided with several suffix-enlargements or forms of composition. The general meaning of the group is 'growth' or 'manhood'. It is impossible to trace here the development of the various vocables or the attempts made to combine them, but it may be assumed that ultimately there is a root-connection common to words like Lat. *puer*, *pūbēs*, *pūsus*, *pūpus*, *pullus*, Grk. *πῶλος*, *παῖς*, Skt. *pō'tah*. *putrāḥ*. The sibilant extension of the root is most obvious in Grk. *ὀπνίω*, *ὀπνισμαι*, but it is at least possible in Lat. *pūbēs*, *pūsus* (variously explained).

Skt. *pums-* 'man' (stem **pumas-* in gen. sg. *pums-ah*, inst. pl. *pum(s)-bhiḥ*, old voc. sg. *pumah*; reformed stem **pumān-* in certain other cases) is frequently included in the list and invoked to explain the formation of Lat. *pūbēs* (< **pums-dhē-s*) or Grk. *ὀπνίω* (v. supra). This word in Sanskrit seems to be anomalous and unparalleled, and attempts to explain it as a compound form (e.g. from cognates of Lat. *mās*, *māris* or Skt. *manu-ḥ*) have not been generally accepted. It is more easily explained, despite the doubt expressed by Walde-Pokorny,²³ as from IH **pu-yes-* by transfer of intervocalic *-y-* (after *-u-*) to *-m-* (cf. Sturtevant, AJP 50.360 ff.). This pre-Indo-European change, though considerably obscured by later analogical formations, is particularly in evidence in Hittite and Sanskrit (cf. Skt. *gomāyah* 'bovine': **g^uow(y)-eḡo-s*, but Skt. *gavyah*, Av. *gaoya-* 'bovine': Grk. (Hom.) *τεσσαράβοιος*). Hitt. *-pus-*, Grk. *-πῦσ-*, then, may represent a reduced form of this extension of the root.

5. Hitt. *suppalas* occurs in a paragraph of the legal code²⁴ in the following sentence: (22) *ták-ku su-up-pa-la-as-se-it ku-e-el-ka si-e-u-ni-ih-ta* (23) *ta-at par-ku-nu-zi na-at ar-ha pi-en-na-a-i*. The context indicates that provision is being made for the proper treatment of domestic animals. Hrozný translates: 'Si un jeune animal de quelqu'un devient orphelin (23) il l'élève et le fait sortir' etc. I should prefer to render it: 'If any one's (herd of) swine becomes mired²⁵ (23) one cleans

²² Walde-Pokorny, VWIS s.v. *pumes-*.

²³ VWIS s.v. *pumes-*.

²⁴ KBo VI 26 I 22.26; Hrozný, CH 126.

²⁵ This follows a suggestion of Sturtevant, though in his Hittite Glossary he proposes the translation 'gets caught'.

it and drives it on.' Hrozný evidently takes *parkunu-* from *parkus* 'high', but it seems to go better with *parkus* 'clean' (cf. the verb *parganu-*, which has a similar variety of meanings).

What is doubtless the same substantive, *sup(pa)las*, is found in KBo VI 34 in the following sentence:²⁶ AN^{mes} HUL-lu hur-ta-an-du nu-us-si-is-sa-an u-e-el-lu-us | ha-a-li-is-si a-sa-u-ni-is-si su-up-li-es-si li-e lu-lu-wa-it-ta. Friedrich translates 'Und die Eidgötter sollen ihn böse verfluchen, und ihm möge die Aue (?) für sein . . . , sein . . . , sein . . . nicht gedeihen (?), (aus seinem Felde aber möge ihm . . . , . . . nicht kommen)', and in a footnote adds 'vielleicht für sein Grossvieh, sein Kleinvieh, sein Jungvieh?'. The forms *halis(s)i*, *asaunis(s)i*, *suples(s)i* are set down as locatives singular by Friedrich, but *-si* appears to be the pronominal particle 'his' added to dative singulars of *hali-*, *asaun-* (*asawar*), *supla-*. The first two of these words occur together in another paragraph (KBo VI 3 III 51 ff.)²⁷ where *hali-* seems to be an enclosure (or herd) of draught-cattle, *asaun-* an enclosure (or herd) of sheep and goats. *Hali-* alone is found in another passage (KBo VI 26 II 21 ff.)²⁸ in the phrase GUD.MAH.as ha-a-li 'stable (?) of a fullgrown ox'.

These passages give the impression that *hali-*, *asaun-* and *sup(pa)la-* refer to three classes of domestic animals (in herds or enclosures). The context reveals a comprehensive curse on field or meadow, involving the possessor's domestic beasts. The curse, to be effective, must leave no loophole of escape for the welfare of the accursed; in this case the beasts of the field, or their several enclosures, are enumerated in turn (for the practice cf. the Latin curse inscription from Minturnae, CIL 10. 8249: *dii iferi, vobis comedo ilius membra, colore, figura, caput, capilla, umbra, cerebru*, etc.). Now the prevalent division of domestic animals by the ancients was evidently (1) (draught-) cattle (i.e. oxen, cows, bullocks, with which might at times be included asses, mules, horses), (2) sheep and goats, (3) swine. This is exemplified by the *suovetaurilia*, the outstanding Roman sacrifice, including representatives of all three groups. This sacrifice, especially associated with Mars, was reserved, in accord with its general character, for occasions which involved the whole populace, urban or rural, e.g. at the time of census, or military review, or the *lustratio agrorum*. At the feast of Ambarvalia in honor of Mars these same three representative beasts (pig, sheep, bullock) were driven

²⁶ Friedrich, *Der hethitische Soldateneid*, col.4 11.12-15, ZA NF 1.169, 189.

²⁷ Friedrich, ZA NF 1.189; Hrozný, CH 58.52.

²⁸ Hrozný, CH 135.

round the city circuit. In Spain we find Diana Maxima honored by the sacrifice of *vacca ovis alba porca*,²⁹ a colonial copy of the *suovetaurilia*. Victims for lesser occasions were chosen from one or other of the three classes. For the private family ceremony the pig was found cheaper and more numerous, and was more commonly chosen. For state sacrifices the more important groups of beasts prevailed, *victimae maiores* (*bos, iuencus, vitulus*) or *victimae lactentes* (*ovis, agnus*).³⁰

Since *hali-* and *asaun-*, whatever their etymology, distinctly refer to the larger domestic animals and to sheep and goats respectively, Hitt. *sup(pa)la-* may be translated as 'sty, pigpen' or 'herd of swine', instead of 'young animal(s)' as Hrozný and Friedrich venture to suggest. It can be derived, as a compound, from IH **sū-* 'swine', as in Av. *hū-*, Grk. *ūs*, Alb. *θi*, Lat. *sūs*, Toch.B *suwo-*, OHG, OE *sū*, Skt. *sū-karah*. For the second element (*-pala-*), cf. Lat. *opilio* 'shepherd', from **oyi-piliōn-*. Lat. *-piliōn-* is evidently based on a substantive stem **palo-* or **polo-*, and is a parallel formation to *ludio* 'stage-player' (: *ludus*), *lucrio* 'one fond of gain' (: *lucrum*), *centurio* 'centurion' (: *centuria*). With this word Lat. *Pales* 'god(dess) of shepherds' may stand in close relation.³¹ In Greek *οιοπόλος*, *αιπόλος*, *βουκόλος* the IE root **q^wel-* may have been partly contaminated by **pel-* 'drive'.³² The substantive *-pala-* then should mean 'drove, gathering' and so 'enclosure, pen'. The same root is doubtless present in ON. *falr*, *spjótsfalr* (stem *-fali-*) 'socket of spear-head', and with a dental addition in Eng. *fold*, OE. *fald*, *falod*,³³ Dan. *fold* 'sheep-pen', Du. *vaalt* 'dung-pit'. Hitt. *-pala-* can represent either **-polo-* with *o*-grade of the root, or **-plo-* (cf. Hitt. *pahhuwar* 'fire' < **p_hhuōr*) as in Lat. *Pales* and probably in *opilio*.

6. Hitt. *wantai-* 'be warm, glow; be angry'³⁴ contains a root which occurs also in the extended form *wantes-* 'be warm', and in the substantive *wantemas* (gen.) 'lightning; heat; anger',³⁵ *wantewantemas* (gen.) 'lightning'.³⁶

These forms may be assigned to IH **yendh-*, **yondh-*, **y_hndh-*, with

²⁹ CIL 2, 3820.

³⁰ Müller, Hdbh der klassischen Altertumswissenschaft, Religion und Kultus der Römer, 35, 142, 415.

³¹ Walde, LEW² 541: **pli-*.

³² Walde, l.c.

³³ Cf. Gloss. Epinal. *stabulum*, *falæd*.

³⁴ Götze, Kf 1.187.

³⁵ Götze, l.c.

³⁶ Cf. *wantiwantaz*, *wantaz* (abl.). Sayce, JRAS 1930.314, interprets the word as 'cloud'.

the basic idea 'scorch, dry with heat'. The use of hot coals for this purpose probably induced an early extension of meaning to include 'glow' as well, while the connotation of dryness brought also the meaning 'wither'. Cf. OB *uvēdati*, *uvēnati* 'wither', Russ. *vjānuti* 'wither, dry, fade', Slov. *prosovōditi* 'dem Hirse mit erhitzten Steinen einen besseren Geruch geben', *povōditi* 'räuchern', Skt. *vandhyah* 'unfruitful', *vandhyā* 'unfruitful wife'.

With these words I would connect Grk. *ἄνθραξ*, -*kos* 'coal, ember'³⁷ as from **φανθ-ρο-* or **φανθ-ρυ-* + *ακ-* (cf. *λάβραξ* 'fish, sea-wolf' < **λαβ-ρο-*); also Grk. *ἄνθρυ-σκον*, *ἐνθρυσκον*, *ἀνθρίσκος*, *ἀνθρίσκων* 'wild chervil, aromatic pot-herb'.³⁸ An extension of the root in the form **sṷendh-* appears to be found in OB. *prisvēdati* *prisvēnati* 'marcescere, torrefieri'.

The Hittite (*wante*)*wantemas*³⁹ 'lightning' suggests a primitive development of meaning in the direction of 'flash' as well as 'glow', similar to the English 'gleam' beside 'glow, gloom'. The semantic connection may be strong enough to include in the group (under IE **sṷendh-*) the English word *wonder* (OE *wundor*, *wundrian*) on the basis of a primary meaning 'dazzling object' or 'state of astonishment'.⁴⁰ Etymologists seem to have found no connections for this English word outside of the Germanic languages.

7. Hitt. *irmas*,⁴¹ *irmalas*,⁴² *irmalanza*,⁴³ 'ill' and the derivatives *irmatar* 'illness'⁴⁴ and *irmal(l)iya-* 'be ill' are based on an adjectival stem with suffix *-mo-*, probably from IH **er-mo-*, **or-mo-*, to which may be assigned Goth. *arms* 'ἐλεεινός', OHG *ar(a)m*, OE *earm*, ON *armr*, etc.; Arm. *ot-ormim* (< **or-orm-im*) 'misereor'.⁴⁵ Both *e*-grade and *o*-grade of roots are coupled with the *-mo-* suffix: cf. Grk. *θερμός* 'warm', *εἰρμός* 'series', *δρμος* 'collar', *φλογμός* 'flame'.

The original meaning of the adjective, therefore, was probably

³⁷ Other certain connections of *ἄνθραξ* fail: e.g. ON. *sindr* 'slag', NHG. *Sinter* 'dross', as from **sendhro-*, accepted by Fick I⁴.562, Boisacq, Dict. Ét. 63, but rejected by Kluge, Et. Wb.⁶ 366.

³⁸ S.v. *chervil* the NED quotes C. Marshall, 1813 'formerly in much estimation for its warm taste.'

³⁹ For the reduplication cf. *kunkunuzzi* above.

⁴⁰ Cf. Servius in Aen. 3.172: *attonitus est stupefactus; nam proprie attonitus dicitur cui casus vicini fulminis et sonitus tonitruum dant stuporem.*

⁴¹ Hrozný, BoSt 3.166; Götze, ZA NF 5.79.

⁴² Hrozný, l.c.

⁴³ Friedrich, Vert. 2.188.

⁴⁴ Ehelolf, ZA NF 5.79.

⁴⁵ Meillet, MSL 10.280.

'miserable, wretched', from which in Hittite it was restricted to bodily misery or sickness, in Germanic applied more generally to poverty or social wretchedness.

Of other interpretations of Goth. *arms*⁴⁶ the more generally accepted is a derivation from IE **orbh-no-* with assimilation, first of the nasal, then of the labial; cf. Grk. *ὀφθαλμός*, Lat. *orbis*, Hitt. *arpas*. A similar assimilation may be claimed, perhaps, for the Hittite words above, on the basis of a derivation from **erbh-mo-* or **erbh-no-*. In this case, the meaning 'ill' would be developed from 'helpless, bereft', so 'unfortunate', but the association of ideas seems more unlikely than that given above.

8. In Keilschrift-Urkunden aus Boghazköi⁴⁷ occurs, in somewhat mutilated form, a ritual for securing the successful delivery of a child. Lines 22-24 of column 2 read: nu [GIŠ]ERIN GIŠPA INA YÂ GIŠZE.IR. TUM IŠ.TU SĪG.DIR (23) an-da is-hi-ya-an na-at LU pa-ti-li-is (24) da-a-i na-at-kán A.NA SAL i-pu-ul-li-ya-as an-da da-a-i, 'and a cedar stick in oil of an olive tree is wrapped in red wool. And this the *patilis* priest takes; accordingly he puts it into the woman's vagina (?).' Between this passage and col. 3 line 11 the inscription is fragmentary, but evidently contained some ritualistic formulae or priestly ceremony. In col. 3 lines 1ff. the woman is conducted to the birth-chair (*harnāus*) and in line 6 she takes her place therein. The passage closely following this (KUB 9.22.3.11ff.) is as follows: na-as-ta LU pa-ti-li-is ku-it GIŠ-ERIN (12) [GI]ŠPA INA YÂ GIŠZE.[IR.]TUM IŠ.TU SĪG.DIR (13) [a]n-da is-hi-ya-an A.NA SAL i-pu-ul-li-ya-as (14) [a]n-da da-is na-at-si-kán ar-ha da-a-i, 'then what cedar stick... he put into the woman's vagina (?) that he accordingly takes out of her.'

The context and phraseology alike indicate that *ipulli-* (the gender of the word is uncertain) means 'vagina'. Suffixes in *-l-* occur with some frequency in Hittite and in most cases perhaps are of Asianic provenience. The suffix *-ul(i)-* is exemplified by Hitt. *tapulli* 'plate, tray' (the resemblance to which of Lat. *tabula* 'board, plank; table, tablet' might lead one to risk suggesting a common Aegean origin),⁴⁸ *sesarul* 'strainer': *sesarisk-* 'strain', *pittulas* 'noose', *pupuli* 'ruin (?)', *kuskussulli* 'mixer (?)': *kuskus-* 'mix (?)'.

The first element of Hitt. *ipulli-* I connect with the root of Grk. *οἶφος* (2 sg. -φς, -εῖς) 'futuo', *οἰφόλης* m. *οἰφόλης* f. 'dissolute' (where the root is

⁴⁶ E.g. by Meringer, IF 18.246 f.; v. Feist, Et. Wb. s.v.

⁴⁷ KUB 9.22.2.22 ff.

⁴⁸ Lat. *tabula* is etymologically unclear. Ernout-Meillet incline to believe that it is a borrowed word. Umbr. *tafle* need not be the same word.

combined with an *l*-suffix as in Hittite); Skt. *yábhati* 'futuit', Russ. *jebáti*, Slov. *jebati* 'futuere'. The connection of Lat. *ibex* 'species of buck-goat' with this group is made by some scholars, denied by others. The formation of the Greek words is variously explained: (1) by a base **oġebh-* by Boisacq and Hirt, (2) as from **o* + *ġabh-*, *ibh-* by Walde, Brugmann⁴⁹ and Walde-Pokorny,⁵⁰ (3) as from **o* + *ġebh-*, *ibh-* by Brugmann.⁵¹

If we assume a base **oġebh-*, Hitt. *ipulli-* may represent either the original grade **oibh-*⁵² or the nil-grade **ibh-*. If a root **ġabh-* or **ġebh-* is posited, the reduced grade **ibh-* is found in the Hittite. The representation of original intervocalic *-bh-* by *-p-* in Hittite has been fully established.⁵³

9. Hitt. *palwas*, which seems to mean 'mud, mire'⁵⁴ is identified by Marstrander with Grk. *πηλός* 'mud, mire', which he derives from **παλφος*. This interpretation of *πηλός* Boisacq rejects as 'désuet', but does not pin his faith to any of the other proposed etymologies.⁵⁵

Whatever the origin of Grk. *πηλός*, Hitt. *palwas* may be taken with Skt. *palvalám* 'pool, marsh', OHG *felawa* 'willow tree', NHG *Felbe(r)* 'white willow', from IH **pel-eu-*, **pel-u-* (cf. **pel-ē-*), extensions probably of the root **pel-* 'pour' (cf. Lith. *pilti* 'pour'). The suffixed *u*-element appears also in Skt. *plutaḥ* 'submerged', Grk. *πλυνός* 'bath', *πλύνω* 'wash', Lat. *pluit* 'it rains', and with a dental addition in Lat. *palūs* (*palūd-*, probably from **p_el-eu-d-*) 'marsh, pool', Grk. *πλάδος* 'humidity', OHG *fliozan* 'flow'.

The Hittite cuneiform writing *pal-wa-as* seems to represent IH **p_el-ū-s* (or **pol-ū-s*), with which Skt. *palva-lá-m* is in closest relation.

⁴⁹ IF 32.326. On this basis Grk. *ἀφάω*, *ἄπτω*, *ἐπαφός* can be included in the group.

⁵⁰ VWIS s.v. *ġabh-*.

⁵¹ IF 29.238 n.

⁵² The treatment of IH diphthong *oi* in Hittite is not altogether clear, but cf. *-si*, Grk. *oi*, enclitic 3 pers. pronoun.

⁵³ Sturtevant, LANGUAGE 3. 121, 4.151; Carruthers, LANGUAGE 6.163.

⁵⁴ Weidner, Stud. 124; Marstrander, Car. 141.

⁵⁵ E.g. Meillet, MSL 13.291 f., Etudes 418: IE. **q^hālo-s*; Schulze, SB d. preuss. Ak. d. W. 1910. 788, 793: IE. **palsó-s*; Sommer, Gr. Lautst. 74: **πασλό-s* : *πάσκος*.

GERMANIC INFLUENCE ON OLD FRENCH SYNTAX

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In a previous article (*LANGUAGE* 7.194-9) U. T. Holmes sought to establish the probability of German influence on the syntax of late Latin as spoken in northern Gaul.¹ He also suggested a method for determining those Germanic constructions which differed most from popular Latin; and, where these German constructions are present in Old French syntax he assumed that an interconnection was quite possible. Willem L. Graff has observed recently that 'it is not yet possible to formulate the general laws that are thought to rule the drift of syntactical features.'² This may be true, in part, but it is safe to argue that every language has inherent tendencies which work themselves through to an expected conclusion, once the restrictions of artificial grammar become lax. It is possible to foresee much of late vulgar Latin in primitive and early Latin. The drift is continuous—no radical departures of syntactical construction are apt to develop without a rude shock from without, and, as was argued on good authority in the earlier article, the most vigorous shock which Gallo-Latin had to bear was from the horde of Germanic speakers who eventually took political possession of northern France. Furthermore, whatever we may say of the phonology and spelling of Saint Jerome's Vulgate Bible, its syntax (particularly before the revision by Alcuin) shows the popular concept of the phrase and sentence as held in the fourth century A.D. By confronting the Vulgate text with painfully literal translations made from it into OHG it is not difficult to discover those Germanisms which were essentially different from the late Latin drift. At the same time no construction must be labelled Ger-

¹ Recently (*Rev. Ling. Rom.* 4.309 ff), as an argument for the unsoundness of historical syntax, Carl de Boer has cited the fact that German and Romance have occasional resemblances in syntax not to be accounted for in classical Latin. Eugen Lerch (*ibid.*, 6.127) answers this with the suggestion that in some individual cases there may be influence from low Latin constructions on both Germanic and French. Surely it is safer to search, as we have done, for influence from OHG to Gallo-Romance. See also G. W. Small in *LANGUAGE* 8.314.

² *Language and Languages* 291 (Appleton 1932).

manic, even by this careful comparison, until a check has established that it is not present, or only slightly so, in the other Romance tongues. Italian and Provençal suffered less Germanic influence than French; Spanish had still less, and Roumanian almost none at all.

In the article to which we refer Holmes gave examples to show that the order Subject + Complement + Predicate in subordinate clauses in OFrench was Germanic. Thanks to the labors of Miss Eloise Vaughn, who has since made a most thorough comparison of the Tatian and Monsee-Wiener OHG translations with their Latin originals, it would now be possible for us to increase these examples many times; but the conclusion would not be altered thereby. It has since come to our attention that Albert Dauzat also designates this word order as a Germanic survival in OFrench.³

Other OFrench constructions of possible Germanic source were suggested by Holmes without discussion and it is now our intention to examine these and several additional possibilities in the light of further examples gathered by Miss Vaughn.⁴

1. *Si* introducing an apodosis in an OFrench conditional phrase is of almost certain Germanic origin, as proved by the frequency of *si... sic* conditions in the Lex Salica, a legal code compiled in Latin by the Salian Franks.⁵ It remains to examine the construction in more detail. Foulet says of it: 'On aime en particulier à opposer de cette façon *se* conjonction et *si* adverbe'. Apparently he prefers to explain it psychologically: 'on en viendra à voir dans le mot un simple appui pour la voix, un moyen commode de relancer la phrase après un arrêt'.⁶ Meyer-Lübke thought that it is 'eine romanische Neigung durch deutschen Einfluss zu einer grössern Ausbildung gelangt...'⁷ Neither of these scholars has equated with the *se... si* condition a similar OFrench construction in *se... donc*; and, of course, we have similar conditions ex-

³ Histoire de la langue française 434 (Paris: Payot 1930). He offers no proof.

⁴ Our examples are drawn mostly from the following texts: Eduard Sievers, Tatian (Paderborn: Schöningh 1892), which we designate as T; G. A. Hench, The Monsee Fragments (Strassburg: Trübner 1890), indicated by the letters M-W; Le Roux de Lincy, Les Quatre livre des Reis (Paris: Imprimerie royale 1841), indicated by K; and such OFrench works as the Chanson de Roland, the Life of Saint Alexis, and the lays of Marie de France, which are easily available in a number of editions. Marie's lays are cited by their individual names, Eliduc, Guigemar, Yonec, Equitan, Bisclavret, Milun, etc.

⁵ Examples from the Lex Salica are given by Holmes in LANGUAGE 7.196.

⁶ Petite syntaxe de l'ancien français 301 (Paris: Champion 1930).

⁷ Gramm. d. rom. Spr. 3.698.

pressing time in *quant*... *si* and *quant*... *donc*. We give examples of each: *Se ele puet, si'l retendra* (Eliduc 330), *S'il le puet del cheval abatre dunc sera il en fin honiz* (Milun 354-355), *Se ce puet estre et ce fu... si en face ma volonte* (Yonec 105-108). Examples with *quant* are: *Quant ce ot dit, si soupira* (Equitan 93), *Quant il virent Nicolete si bele, si la porterent molt grant honor* (Aucassin et Nicolette 36.4), *Quant uns granz biens est mult oiz Dunc a primes est il fluriz* (Marie's Prologue 5-6).

We propose to see in this OFrench conditional usage direct continuation of the OHG *oba...thanne*, *mittiu...thanne*, and other variants such as *thanne...thanne*, and *so...so* (for clauses of manner):

Si fuerit oculus tuus simplex, totum corpus tuum lucidum erit; si oculus tuus nequam fuerit, totum corpus tuum tenebrosum erit, Oba thin ouga uuiridit luttar, thanne ist al thin lihhamo lichter; oba thin ouga aruertet uuiridit, thanne ist al thin lihhamo finstar (T 36.3)

Domine, si dormit, salvus erit, Trohtin, oba her slafit, thanne ist er heil (T 135.11)

Si autem non dimiseritis hominibus, nec pater vester dimittet vobis peccata vestra, Oba ir ni furlazet mannun, thanne ni furlazit iu iuuar fater iuuara sunta (T 34.7).

Cum autem intraverit pater familias et clauserit ostium, et incipietis foris stare et pulsare dicentes... Mittiu ingengit fater thes hūuisges inti bislufuzet thia túri, thanne begínnnet ir uze stán inti clofon sus quēdente (T 113.1)

Et cum proprias oves emisierit, ante eas vadit, Inti mit diu er thiū eiganun scaf úzsēntit, thanne uerit ér in uora (T 133.7)

Et cum venerit ille, arguet mundum de peccato et de iustitia et de iudicio, Inti thanne her cumit, thanne thuingit her uueralt fon sunton inti fon rehte inti fon duome (T 172.4)

Quod autem his abundantius est, a malo est, So uuaz só ubar thaz ist, só ist íz fon ubile (T 30.5)

Prout vultis ut faciant vobis homines, facite illis similiter, So ir uuollet thaz iu man tuon, so tuot ir in selbsama (T 30.8).

Although *so* (OFrench *si*) is more applicable when expressing manner, and *thanne* (OFrench *donc*) is more expressive of time, the distinction between *donc* and *si* as independent words was not rigidly kept in OFrench—except that *si* was far more common.⁸ There is no evidence in the other Romance languages that would lead us to see in this con-

⁸ An excellent illustration of this is Guardet aval e si guardet amont (Roland 2235) where *si* certainly has the force of *donc*.

struction a Romance tendency. We prefer to go farther than Meyer-Lübke and assume definite Germanic responsibility.

These OFrench conditions of the types *se...si* and *quant...si* were common enough, but commoner still was a variation. By omission of the first element, the conjunction, the protasis could be transformed into an independent clause without the subordinating word—so clumsy to a medieval thinker—while the apodosis or result clause remained as before: *Celui a fet del suen doner, Si l'en cumanda a aler* (Milun 221–222), *Cil que li reis i enveia I sunt venu, si li unt dit* (Lanval 354–355). If the reader will prefix a *quant* to the first clause of each of these examples their conditional nature will be apparent and the use of the *si* in the second clause will be understood.

2. It came about in OFrench, and doubtless in Gallo-Romance, that verbs of motion needed to be constantly reinforced by an accompanying adverb, or preposition used as an adverb—or, perhaps we can express this more clearly by saying that OFrench, like modern English, was fonder of general verbs of motion plus adverb of direction, than it was of specific verbs with their direction selfcontained. We say in English 'get up' for 'rise', 'go along' for 'accompany', 'come down' for 'descend'. This is because English is a Germanic language, and perhaps the same—Germanic influence—will account for the phenomenon in OFrench. Here are cases of the OFrench usage: *Il vait avant, si descent jus, A grant anguisse munta sus* (Guigemar 165–166), *Milun saut sus, molt li fu bel* (Milun 429), *Cil point avant, e il remaint* (Guigemar 137), *Que tost l'estuet descendre aval* (ibid. 100), *Cil s'en ala ensemble od li* (Bisclavret 307),⁹ *Le sanc vermeil en issi fors* (Yonec 316). Such examples as these abound on any page of OFrench text. From the seventeenth century on, when the French language was modeled more closely after Latin usage, this type of construction became less and less frequent until to-day it is considered slangy.

We now offer some examples of the separable prefix in OHG: *Intrate per angustam portam, Gét in thuruh enga phorta* (T 40.9) *Piscatores autem descenderant, Thie fiscara stigan nidar...* (T 19.4)

Et si dextera manus tua scandalizat te, abscide eam..., *Inti oba thin zesuúua hant thih bisuihhe, hou sie ába...* (T 28.3)

...et in umbra mortis lux orta est eis, ... inti sizzanten in lantskeffi tódes scuúuen liot gieng in úf (T 21.12)

⁹ Note that the reinforcing adverb is not the same as a preposition introducing an adverbial phrase. The two must not be confused.

The separable prefix is a well known Germanic construction that does not require any special demonstration.

3. As a rule in OFrench syntax the limiting genitive stands after the noun it restricts—as in Latin. Lucien Foulet notes a remarkable exception of not infrequent occurrence in such examples as *Dame*, *fet il*, *por Deu merci* (Guigemar 513), *Et sa fille fu bien nourrie*; *Si fu donnee a la Dieu loy* (Galeran de Bretagne 684–685), *Païen esgardent le Carlon messagier* (Aspremont 2384), *Fus tu donc a la roi court?* (Bérout's *Tristan* 2498), *Or seras mais Looïs provendiers* (Couronnement Looïs 1103). Of these Foulet says: 'Notons que le mot Dieu entre dans les locutions toutes faites où, quoique complément déterminatif, il précède le mot déterminé. Il y a là un reste d'une construction archaïque dont on trouve encore quelques exemples au XIIe et au XIIIe siècle dans la langue un peu artificielle des chansons de geste'.¹⁰ Whence this 'archaic' usage which, our examples would show us, must have flourished sometime in the six hundred years before eleven hundred—since it is not Latin and it is contrary to general OFrench usage? Compare the OHG:

Inti quena imo fon Aarones tohterun (T 2.1) . . . , *Et uxor illi de filiabus Aaron* . . .

Manago uuituvvun uuarun in Heliases tagun (T 78.7) . . . *Multae viduae erant in diebus Heliæ* . . .

Very common in the OHG Bible translations are *bi gotes diuri du* [pro gloria dei], *gotes rihhi* [regnum dei], *fon gotes munde* [de ore dei] and like expressions.

4. A very difficult construction to trace historically is the use of *homo*, and its Romance descendants, as an indefinite pronoun. Its presence to a limited degree in OSpanish and OItalian (consult C. B. Brown in *LANGUAGE* 7.265–77) would lead us to suspect it of being an inherent Latin expression, although some Germanic influence is by no means impossible in either Spain or Italy. Let us remember that when *homo* is used as a subject pronoun there can be postulated three well-defined shades of meaning: (1) a generic use to be translated 'mankind' or 'a man' as distinguished from other living beings,¹¹ (2) the indefinite use where a *homo videt* is equivalent to *videtur*, (3) the equivalent of a passive construction: *homo videt canem* for *canis videtur*. Brown says:

¹⁰ *ibid.* 18

¹¹ It is evident that Brown sees in such a translation as a 'man' many varying shades of indefiniteness which he tends to differentiate from the generic usage. This is a philosophical rather than a grammatical problem. We contend that *homo* is grammatically indefinite only in cases (2) and (3) outlined herewith.

'There are various degrees of indefiniteness, all of which are admirably rendered in French by *on* [*< homo*], but only the vaguest of these [no. 2?] was conveyed by [Spanish *hombre*]. When the indefiniteness decreases, Spanish has resorted to the indefinite third person plural...'.¹² Because of Brown's investigation we were tempted at first to omit the indefinite *homo* construction from our list. But the fact that French, alone among the Romance languages, uses *on* as widely as the German indefinite *man*, and the fact that Brown's examples, which he cites to prove an early indefinite *homo* in Latin, are inadequate, have induced us to assume at least some Germanic guidance in the development of the indefinite and passive *homo* on northern French soil.

A trained grammarian may unconsciously force the meaning of a construction when he seeks to prove a point. An impartial way of observing the true meaning of a Latin construction is to consult good translations made by competent Latinists who had no syntactical 'axes to grind'. Brown quotes one example from the Vulgate (Matthew 4:4): *non in solo pane vivit homo*. Martin Luther translated this: 'Der mensch wirt nit von dem brott allein leben', where *mensch* is certainly generic. The OHG Tatian rendition of the same is 'thaz in themo einen bróte ni lebet *thie man* (T 15.3)'. The standard French Bible of to-day translates: 'L'homme ne vivra pas...' There is no question of such a rendition as 'On ne vivra pas...' Contrast this passage with those places in the Vulgate text where an obvious indefinite construction is expressed by the Latin passive, and which the Tatian translators rendered by an indefinite pronoun *man*:

Et ego vobis dico: petite et *dabitur* vobis... pulsate et *aperietur* vobis, Inti ih quidu íu: bitet inti íu *gibit mán*... clophot inti íu *intuot man* (T 40.4)

...et ibi manete donec exeatis, edentes et bibentes que *apponuntur* vobis,... inti thár uuónet unz ír úzfaret, ezente inti trinkente thiu *mán* íuuih *furiszeze* (T 44.7).

Brown cites from Terence *accipit homo nemo melius prorsu' neque prolixius* (Eunuch 1082), only he gives *hominem* incorrectly for *homo*. This passage is translated by Ritchie as 'Not a man gives better dinners or more sumptuously served'¹³ in which *homo* is a reinforcement of *nemo*. Although 'not a man' comes to mean *nullus* in Latin this is psychologically a different construction from what we have under consideration. Brown expresses this fact in a note: 'We are not concerned here with the use of a negative plus *hombre* = *nadie*'.

¹² *ibid.* 272.

¹³ W. Ritchie, *The Plays of Terence* 189 (London: Bell 1927).

From Plautus Brown quotes *at illa laus est, magno in genere et in divitiis maxumis liberos hominem educare, generi monumentum et sibi* (Miles gloriosus 703-4), omitting those words which we have left unitalized. These omitted words make all the difference in the world. The translation should be 'Tis some merit for a man of noble family and of ample wealth to rear children, a memorial to his race and to himself'.¹⁴ We should not call this *hominem* the equivalent of an indefinite pronoun. The remaining five examples, cited by Brown, are all later than 350 A.D., which does not preclude Germanic influence. Even so they are not wholly satisfactory as examples of an indefinite pronoun *homo* in Latin usage. Here is one from the famous *Peregrinatio*: *Et iam ex illa hora hitur ad civitatem pedibus cum ymnis, pervenitur ad portam ea hora, qua incipit quasi homo hominem cognoscere*. We have no published translation of the *Peregrinatio* at hand, but we should translate as follows: 'And already at that hour *they* go to the city on foot singing hymns and *they* reach the gate at that time when it is beginning to be possible for *one man* to see *another*'. Note that the two genuinely indefinite subjects are expressed by the Latin passive. We do not wish to consume space with the remaining four cases cited by Brown, since we have no impartial translations at hand, consistent with our method; but there is considerable question in each one as to whether we have an indefinite pronoun usage. In any event we believe that Brown would be willing to admit that *homo*, if used as an indefinite in late Latin, had only the vaguest shade of indefiniteness and was not equivalent to the *on* in such OFrench constructions as: *a cel tens ne pout hom trover Si bon chevalier ne sun per* (Guigemar 55-56), *Pur ceo qu'um le perdeit sovent* (Bisclavret 127), *Le Chaitivel l'apele hum* (Chaitivel 127), *Jadis le pooit hom oir* (Bisclavret 5). From the OFrench prose Bible text we have... *que l'um seit obeissant a sun plaisir e a sun commandement* (I K 15:22) translating... *ut obediatur voci Domini* and *E si... vienge que l'un priet pur lui* (I K 2:36) for the Vulgate *Ut... veniat ut oretur pro eo*. We append an additional example from OHG: ...*et traditus est illi liber prophetae, ... inti salta mán imo then buoh thés uuizagen* Esaias (T 18.1).

On the strength of this we believe that the use of *homo* with an active verb to render in Gallo-Romance two uses of the Latin passive voice, the impersonal and passive concepts, is largely of Germanic origin. There was really no need for such a syntactical construction in Romance

¹⁴ H. T. Riley, *The Comedies of Plautus* 1.105 (London: Bell 1894).

until after the Latin passive weakened, which Muller says began after the sixth century.¹⁵

5. A type of adverb frequent in OFrench is formed with the aid of preposition *a*: *A merveille se descunfort* (Eliduc 1090), *Siglent a fort e nagent e government* (Roland 2631), *Bien le sachiez a desouvert* (Lanval 298-299), *Donc a primes est il floriz* (Marie's Prologue 6). Please note that in constructing the adverbial phrase the *a* may be prefixed to a noun, to an adjective, or to an already existing adverb. The first of these combinations is by far the commonest and it was most certainly a Latin tendency which became more and more pronounced as the case endings were simplified. Kühner devotes six closely printed pages to the uses of *ad* governing a noun in the accusative, and among them are phrases expressing manner.¹⁶ Dr. Mario Pei, in a recent publication, is quite certain that 'In accordance with Romance development this use [of *ad*] is restricted to nouns. . .'¹⁷ In any case he does not find any examples of the use of *ad* with an adjective or adverb, in eighth-century Gaulish texts, to express an adverbial concept. Theoretically such a construction as *siglent a fort* could be explained by the ellipsis of a possible noun; e.g., *siglent a (vent) fort*, as must have been the case in Latin after the preposition *de*; e.g., *de vero, de novo*.¹⁸ It would seem that *a* with an existing adverb has precedence in OHG. Braune says that OHG adverbs 'werden oft durch die praeposition *zi* (*az*) verstärkt. . .'¹⁹ We give a few examples:

Invenit hic *primum* fratrem suum Simonen, Thô fant her *zi érist* sinan bruoder Simonen (T 16.4)

. . . *vere* filius dei es, . . . *zi uuäre* gotes sún bist (T 81.5)

. . . non iurare *omnino*, . . . *zi thuruhslahti* ni suuere (T 30.2)

. . . *novissime* veniunt, . . . *az iungiste* quemant (M-W Matthew 25.11).

Compare these with OFrench *Si fist la spouse dan Alexis Alexis a certes* (St. Alexis 147) and the example of *a primes* gives above. Note that OFrench has an adverbial ending in *-s*.

6. Albert Dauzat, while omitting discussion, says of the inversion of subject and verb, in an OFrench sentence beginning with the comple-

¹⁵ A Chronology of Vulgar Latin, Z. f. rom. Phil. Beiheft 78.74 (1929).

¹⁶ Ausführliche lateinische Grammatik 3.518-23.

¹⁷ The Language of the Eight-century Texts in Northern France 241 (New York 1932).

¹⁸ The NED is our authority that English *anew* and *afresh* go back ultimately to *of new* and, possibly, *of fresh*.

¹⁹ Althochdeutsche Grammatik 268, n. 3 (Halle: Niemeyer 1911).

ment, that it is 'visiblement d'origine germanique'.²⁰ We give only one example as the order is of very common occurrence: Mais encore faiseit li poples ses sacrifices (I K 3:2), translating the Vulgate Attamen populus immolabat in excelsis. It is true that inversion is often found in OHG in a sentence beginning with a complement: Tunc ei dominus ait... , Duo quad imo truhtin... (M-W Matthew 38.1), and it is not impossible that the Germanic usage may have influenced the Gallo-Romance idiom to the extent of making such an inversion more or less obligatory. But, in general, the sentence order Complement + Predicate + Subject is normal in the drift of any analytic language, offering an emphasis that is different from that of the non-inverted order. Sècheyaye says: 'Cependant l'autre ordonnance, celle qui met le prédicat devant le sujet, peut se présenter aussi et elle correspond à quelque chose de plus subjectif dans le mouvement des idées. Celui qui parle exprime d'abord ce qu'il y a de dominant dans la pensée, le prédicat de sa communication'.²¹ In this connection see also the remarks of H. V. Velten (LANGUAGE 8.260 ff).

There are other possible cases where the influence of Germanic upon Gallo-Romance has suggested itself to us, but these questions are so closely tied up with other influences that we judge it best to say no more of them for the time being.

²⁰ *ibid.* 437.

²¹ *Essai sur la structure logique de la phrase* 33 (Paris: Champion 1926).

STUDIES IN THE DICTION OF LAYAMON'S BRUT

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C.

§9. RANK AND CONDITION; WORDLY STANDING, ETC.

ÆDELE 'fame, glory, high repute; might, power; honour' etc. OE *æðelu* (indecl. in Sing.; constantly used in Pl. and declined as a Strong Neuter) 'nobility of birth, high lineage, origin'; in spiritual sense, 'virtue, noble qualities of mind and character'. Cp. the speech of Hrothgar's messenger to Beowulf:—*Eow het secgan sige-drihten min, / aldor East-Dena, þæt he eower æþelu can* Beow. 391-2; and again that of Ælfwine in the Battle of Maldon 216-7:— *Ic wylle mine æþelo eallum gecypan, / þæt ic wæs on Myrcon miccles cynnes*, etc. The spiritual force of this word is well exhibited in a passage from Boethius quoted by Bosworth-Toller:—*Ryht æþelo biþ on þam mode, næs on þam flæsce. Æðelu* has the sense of 'standing, rank, status, rights' in *him on leodsceare / frumbearnas riht freobroþer oþþah* (= *optēah* 'took away?') / *ead and æðelo* Exodus 337-9. The word is used in Beowulf of qualities of mind and character, conceived of perhaps as naturally betokening illustrious birth:—*Gecyste þa cyning æþelum god, / þeoden Scyldinga, þegne betstan* Beow. 1870-1, in the account of Hrothgar's taking farewell of Beowulf.

In the Brut *æðele* seems never quite to mean 'noble lineage', but expresses various other shades of meaning.

(i) 'Honour, credit, glory, fame':—*Da comen al þeos leoden : liðen to-somne . and nomen eft Elidur : and duden hine to his adðelen . heuen hine to kinge* I.289.12-16; *hehte alle þa cnihtes : cumen to þan kinge . and æuerælcne ohte mon : biwinnen his aðelen* II.21.9-12; *his eam wes idæied : and his aðelene æt-fallen* I.383.19-20; *Da ældede þe king : and wakede an aðelan* I.124.21-2; *Ah Brennes hauede vuele men : his æðelene heo amerden . þeo alche dæie hine larden : luðere craftes* I.184.4-7.

(ii) 'State, splendour':—*and þeūs spac þe alde king : þer he on æðelen seat* I.125.18-9.

(iii) 'Virtues, merits':—*he wes ihaten Vther : his aðelen weore store* II.115.2-3.

(iv) 'Rank, dignity':—

For hit was swuþe muchel scome : and ec swiþe muchel grame :

þat scholde quene : beon king in þisse londe .

and heora sunen beon buten : þa weren hire beteren .

of þan aldre sustren : þa þa æðelen sulten habben I.159.11-18.

(v) 'Courage, strength':—*and þe eorl Aruiragus : mid æðele help his broðer* I.395.5-6.

(vi) 'Female chastity, fair fame':—*Nes nan swa god wif : i þon londe þe he walde . zif heo wes a wiht hende : þat he ne makede hore . þæh hit weoren an eorles wif : he bi-nom hire al hire æðelen* I.299.19-300.1.

(vii) The precise force of the word in the following is not quite clear:—*Her wes Arður þe king : aðelen biðæled . nes þer nan swa reh3 mon : þe him durste ræden* II.453.20-3. The words are the poet's comment upon Arthur's mistaken magnanimity in allowing Childric to depart in his ships under a truce, instead of slaying him and destroying his army at Lincoln. Madden's rendering 'Hereby was Arthur the king of honour deprived' is hardly satisfactory; there is surely no question of a loss of 'honour' in any sense of the word. May we perhaps understand the first half-line to mean: 'Arthur had taken leave of his senses', or, less colloquially, 'made an error of judgement'? The sense might, with less probability, be taken to be 'Arthur (by coming to this decision) suffered in reputation', or 'lost prestige'.

MENSC 'state, dignity; honour, reverence accorded to another'.

(i) 'State' etc.:—*Ah fourti wintre heore fader Madan : mid mensca heold his riche* I.107.12-3; and *lond heold mid mensce* I.113.17.

(ii) 'Honour, worship':—*and sette Arðure an hond : al Orcaneies lond . and twa and þritti æit-lond : þe þider in liggeð . and his mon-radene : mid muchelere mensce* II.523.15-20.

TIR 'glory, fame; state of splendour and success; power arising from this'. OE *tīr* means 'glory' in various senses; (1) 'personal glory arising from valour':—*Ða wæs feohte neh / tīr æt getohte* Maldon 103-4; *Her Æbelstan cing, eorla drihten, ./. . . ond his broþor eac, / Eadmund æþeling, ealdorlangne tīr / geslogon æt sæcce sweorda ecgum* Brunanb. 1-4; (2) 'glory, success in an enterprise':—*Hwæt ! we þas sæ-lac, . . . lustum brohton / tīres to tacne* ('in token of our success') Beow. 1652-4; (3) 'splendid conditions of life':—*hyra tīr ond ead / estum ecað* Riddle XXVII.23-4; (4) 'might':—*þe ðe æsca tīr / æt guðe forgeaf* Gen. 2108-9.

Lazamon uses the word with very much the old values:—(i) 'fame,

reputation':—*Bruttus* (= the Britons) *þer demden . sæiden heom bi-tweonen : þa þat tir ahten . Seuarus wes god cniht* II.9.20-3; (ii) ? 'power, dominion':—*He heold þis lond stille : al æfter his iwille . mid treouscipe gode : þe while his tir læste* I.279.5-8. Madden translates 'authority' here, and it may ultimately come to this, but may not the sense be rather 'repute, prestige'? Again, in the line *Seoððen com oþer tir : and neowe tidinde* I.87.8-9, where it is a question of re-naming Trinouant as Kaerlud, 'after the king'. Madden renders the above 'afterwards came other dominion, and new customs'. It might be preferable to render 'afterwards came a fresh glory, and new events', i.e., 'a new chapter in history opened'. (iii) 'Pomp, splendour, etc.':—*Ða kingges weoren deaðde : heore duzeðe to-dealde . twinseden cnihtes : here tir wes at-fallen* I.180.21-181.1, 'their glory was departed!'

WURÐSCİPE 'honour, reputation; worship; glory, splendour, etc'. OE *weorðscipe* has various senses, and implies honour shown to an object; also a state of dignity and honour, and honour and glory.

In the Brut the word has three main meanings: (a) action : 'honour, reverence accorded to a person'; (b) a state or condition of dignity and honour; (c) 'honour, credit, good repute; fame', etc.

(i) 'Act of doing honour to a person'. a) The word is used in the sense of 'worship' as accorded to a divinity:—*and ich þe wulle huren : mid wrhscipe hæzen* (Brutus addressing Diana) I.52.1-2; *Hit ilomp on ane daze : þat Brutus and his duzeðe . makeden halinesse : mid wrscipen hezen* I.77.15-8. b) More generally the word implies honour done to a person:—*þene castel he clepede Lauinion . þat wes for hire worðscipe* I.9.11-12; (my father) *þe dude þe þa wurhscipe : bi-tahte me þe to wiue* I.419.8-9.

(ii) 'State or condition of glory, splendour, pomp, dignity, etc.':—*Feour winter he heuede þat wif : mid wrðscipe to welden* I.9.14-15; *mid wrðscipe comen liðen* I.13.11; *Ðenne hauest þu Englisc lond : to þire azere hond . and alle þine wurðscipe : þus þu miht biwinnen* III.274.21-3; *and swa þu scalt wunien : in wurðscipe þire . a þine kine-dome : i þine rihte icunden* II.519.23-502.3; *me þuncheð þat mi fæder : nis no whit felle . no he wurh-scipe ne can* I.139.21-3.

(iii) 'Honour, credit, good repute, etc.':—*worðschepe haue þu : þire wel-deda* I.134.6-7; *zare we habbeoð stille ileien : ure wurðscipe is þa lasse* II.625.10-11; *þe king . . . mid twenti of his cnihtes . in to ænne muchele wude ! wurðscipen biræiued* II.303.12-4; *for wurðscipe ualleð adune : þer wes ær wunne* III.216.6-7.

D. CONDITIONS AND CIRCUMSTANCES OF HUMAN LIFE

§10. HAPPINESS AND THE REVERSE

ÆDI, EADI, EDI 'blessed, fortunate, noble'. OE *ēadig* 'blessed, happy, fortunate, etc.'.

Læuerd king quað Argal : hæil wurð þu and isunde . þu ært mi broder Elidur : ædi beo þu æuere I.283.5-8. Here the force of *eadi* seems to be 'fortunate, prosperous', as also in *Edi seo þu Aldolf : eorlene aðelest . þu ært me leof al swa mi lif* II.269.21-3. The phrases containing the word are equivalent to 'good luck to you'. A rather different shade of meaning is expressed in:—*Æfter Arður wes iboren : þeo ædie burde . heo wes ihaten Æne : þat ædien maiden* II.385.4-7. Here the force of the word would seem to be 'stately', or 'noble'.

BLISSE 'happiness, rejoicings; good, happy fortune'. OE *bliss* 'gladness, rejoicing; source of joy; kindness, grace'. The word means specifically 'rejoicing' in this passage from Bede's account of the poet Cædmon:—*oft in gebeorscipe, þonne þær wæs blisse intinga gedemed; 'happiness' as a state of existence, in:—hyht wæs geniwod / bliss in burgum Crist* 5.29-30. B.-T. interprets the word as 'grace, kindness', in

*Durh þe eorðbuende ealle onfoð,
folcbearn freoðo ond freondscipe,
blisse minre ond bletsunge
on woruldrice. Gen. 1759-62.*

(i) 'State of happiness':—*Muchel wes þa blisse : þe wes i þanne Brutene* I.408.11-12; *muchel wes þa blisse : þa Brutus hafde mid him* I.47.6-7; *he heold þat lond : and þa leoden mid blissen* I.11.12-3; *blissen al bideled* II.452.11; *þah þu habben blisse and grið* I.192.16.

(ii) 'Exultation, rejoicing, merry-making':—*þa wes harepinge and song : þa weoren blissen imong* II.594.2-3; *Denne sculle Bruttes sone : . . . drazen ut þine banes alle : of þene marme-stane . and mid blissen heom uerien : uorð mid heom seoluen* III.291.8-13.

It is not always easy to distinguish active rejoicings from a general happy state of mind or happy conditions of existence. In the following either may be intended:—*þa weoren inne Bruttene : blissen i-nouwe* I.385.5-6; *þer wes blisse inoh . þa weoren Rom-leoden : bliðen on heore þeoden* II.40.7-9.

(iii) 'Favourable circumstances, good fortune':—*Bluðeliche quað þe king : to blisse hit awurðe* III.14.14-15.

(iv) In the following the sense seems to be 'joys', i.e. circumstances and possessions which promote happiness:—*and heolden on heore hond . burh and heore blissæ* I.255.19-20.

FULSTE 'help, succour'. OE *fylst* 'aid, support, succour' in both material and spiritual sense'.

(i) Material aid:—*mid michelene ferde : Brutun to fulste* I.74.15-6; and *heo hem to fusde : monie to fulste* I.322.6-7.

(ii) Spiritual aid:—*heo beoð for-demed alle : mid drihtenes fulste* II.466.1-2.

FULTUM 'help, support; ? army'. OE *fultum* expresses both material and spiritual aid, also 'source of material aid, a force, an army':—*he mid his fultume næs* Oros.II.5.

The word is chiefly used of spiritual succour by Lazamon:—*we wulleð . . . bidden us to fultume : þat is crist godes sune* II.187.16.17; and *cleoped-en crist godes sone : beon heom a fultume* II.3-4; and *ich ibidde hire* (i.e. the B.V.M.) *sune : þat he us beon a fultume* II.443.13-4.

In the following passage it seems probable that *fultum* means 'army, forces':—*Assaracus hit redde : mid dizenliche runen . þat þat Troynisce folc : mid his fulle fultume . nomen þene cniht Brutum* I.18.17-21.

FROUER '(source of) comfort, consolation, help'. OE *frōfor*. A few passages will illustrate the Old English usage:—*Ðæm eafra wæs æfter cenned / geong in geardum, þone god sende / folce to frofre* Beow. 12-14; *Ac him Dryhten forgeaf / wigspeda gewiofu, Wedera leodum / frofor ond fultum* Beow. 696-8; *þæt* (i.e. the Incarnation) *to frofre gewearð / eallum eorð-warum* Jul. 722-3; *Habbað we to frofre fæder on roderum* Jul. 758.

The usage of Lazamon closely resembles that of Old English:—*þa quen þer efter sone : ænne sune hefde to froure* I.9.20-1; *wærcche (= wræcche?) uolke for fæder : hænen to frouere* (of King Uther) II.323.21-2; *he wes þan zungen for fader : þan alden for frouer* II.413.8-9; *vre children imaked faderlese : and frofre bidæled* II.496.2-3, and a similar line II.570.3-4; *Lauerd drihten crist : domes waldende . midelarde mund : monnen froure* III.14.4-5.

HELP 'aid, succour'. The word is very rare in the Brut, and is not entered by Madden in his Glossary. Stratmann-Bradley gives one reference:—*and cumen him to helpe* I.363.7; another is:—*Ða com þer ride : þat was an eorl riche . . . þan Romanisce to helpe* III.60.19-20, 61.1.

HELPING 'aid'. *Ðe heze heuenliche king : stonde me an helping.* II. 575.9-10.

ISPEDE 'success'. OE *spēd* 'success, prosperity' etc.; e.g. *sumu wiges sped / giefeð æt gupe, þonne gargetrum / ofer scildhreadan sceotend sendað, flacor flangeweorc* Crist 673-6. The word has a wide significance in Old English, but this example corresponds to Lazamon's usage:—*Ðat iher[d] Frolle : þer he wes inne France . of Arðures ispede : and of alle his deden . and hu al bi-wonne : þat he lokede on* II.561.10-15.

SÆL, SEL 'happiness, joy; prosperity'. OE *sæl* 'time, occasion; suitable time; good time, happiness'.

Such phrases in the *Brut* as *sel was an þeoden* II.590.6; *his folc on selen* II.530.11; *harpen gunnen dremen : duzeðe wes on selen* II.538.13-4, are very close to Old English:—*Ða wæs eft swa ær inne on healle / þryð-word sprečen, ðeod on sælum* Beow. 642-3; *folc wæs on salum* Exod. 106; *werod wæs on salum* Exod. 564.

In greetings:—*Bruttes heo gretten : mid græilichen worden . beden heom beon on sele : and alle isunde* I.428.8-11; *he bad þe beon a sele* II.336.22. Cp. the greeting of the Queen to Hroðgar:—*Spræc þa ides Scyldinga: / 'Onfoh þissum fulle, freo-drihten min, / since brytta: þu on sælum wes* Beow. 1168-70.

Other uses of *on sæle* in the *Brut*:—*heora færd wes on sæle* I.56.5; *wimman wes on sele* II.72.13. The passage in which occurs the combination *mid sibbe and mid sæle* is quoted in § 11 under **SIBBE** (ii).

SELÐE, SELEHÐE, etc. 'good fortune, prosperity'. OE *sælþ*. This is not common in the *Brut*. It occurs three times in the phrase *selehþe him* (or *þe*) *beoð* (or *wes*) *ziueðe* II.328.13, 634.14, III.289.21; further, *let þu mi sweuen : to selþen iturnen* III.14.8-9.

WUN, WUNNE 'joy, happiness, well-being'. OE *wynn*. The word is used in Old English with many shades of meaning, and expresses both material and spiritual delight and enjoyment as well as a condition of happiness and well-being.

It sometimes stands for purely physical or sensual pleasure:—*þæt he his lichoman / wynna forwyrnde ond woruldbliissa* Guthlac 134-5; and it also occurs in glosses as equivalent to *luxus* and *luxuria*. It is constantly used of earthly joys and delights generally:—*þa to Euan god yrringa spræc: / Wend þe fram wynne!* Gen. 918-9; *Ic þe þancige, þeoda Waldend, ealra þæra wynna þe ic on worulde gebad* Maldon 173-4; *se þe ah lifes wynn gebiden in burgum* Seafarer 27-8.

It expresses a general state of happiness in:—*wyn eal gedreas* Wanderer 36. The word is frequently used in the sense of 'delight, satisfaction' derived from sweet sounds and natural objects, and has sometimes the sense of objective beauty, loveliness, and so on:—*hearpan wyn* Beow. 2262; *þær bið oft . . . onhliden hleopra wyn* Phoenix 12; *wlitig is se wong eall, wynnnum geblissad* Ph. 7; *lagufloda wynn* Ph. 70. God is called *wigena wyn* Jul. 641. *Weorod wæs on wynne* Beow. 2014 is precisely equivalent to *werod wæs on salum* noted above under **sæl**.

Lazamon more often uses *wun* to express a mood or a state, but once at least in the *Brut* it refers to physical enjoyment:—*we habbeoð þe*

ibroht : . . . *chæld* (MS. *clæld*) *welle water* : *bruc hit on wunne* II.407.7-8. The phrase *bruken* (or *halden*) *on* (or *mid*) *wunne* occurs several times, and usually refers to the enjoyment of benefits, possessions etc.:—(*we wulleð*) *bi-tachen eow þis kine-lond* : *and haldeð hit on eowre hond* . *and brukeð hit mid vnne* II.97.6-8; *haldeð hit* (i.e. the land) *on wunne* III.294.6w.h-7. In the following passages *wun* appears to mean 'a joyful heart, rejoicing':—*and afeoh heom mid wunne* . *þenne heo to þe cumeð* II.168.8-9; *Arður for* (MS. *forð*) *to Eouuerwic* : *mid folke swiðe seollic* . *and wunede þer wiken sixe* : *mid muchelere wunne* II.504.1-4; *wun wes on folke* I.106.24. In the following passages the sense is perhaps rather a state of happiness than the act of rejoicing:—*ne mihte nauere mon cunne* : *na swa muchel wunne* . *swa wes mid Arðure* : *and mid his folke here* II.531.20-3; *And seoðe ich cumen wulle* : *to mine kineriche* . *and wunien mid Brutten* : *mid muchelere wunne* III.144.17-20. It is certainly a state of happiness that is implied in—*nuðe we scullen wepen* : *þæ ær richen weoren* . *for wurðscipe ualleð adune* : *þer wes ær wunne* III.216.4-7. 'Cause for rejoicing, good fortune' is implied in—*Oswald þu art wilcume* : *wunne þe is zeueðe* . *hafue þu al þi kine-lond* III.262.9-11. Christ is the 'source of joy'—*alre worulde wun* I.387.5. Cp. *wigena wyn* in Old English, cited above.

§11. PEACE, CONCORD, AMITY; STATE OF PEACE AND QUIET; HAPPINESS

The group of words which come under this general heading are closely associated in meaning, and, in spite of some differentiation, *frið*, *grið*, *sibbe*, *sæht*, *some*, appear occasionally to be used indifferently with little or no distinction. Besides the general association of meaning, *frið* and *grið* are constantly grouped together in a line by association of sound. Other words of kindred meaning—*sæht*, *sæhtnesse*, *sæl*, *sibbe*, *some*—have the bond of alliteration. Thus we constantly find such phrases as *inne grið* and *inne frið*, and *setten grið* and *setten frið*, and so on. Further such alliterative combinations as *sæhte* and *sibbe*, *mid sibbe* and *mid sele*, *saht* and *some*, *to sibben* and *to some*. For references see the separate words below.

FRIÐ 'peace, treaty of peace; peaceful conditions'. OE *friþ* has various senses:—'protection, security; refuge; peace, freedom from molestation'. It had also the more specific sense of 'king's peace or protection in general', which was 'the right of all within the pale of the Law' (Stubbs, Const. Hist. 1. 180, cit. Bosworth-Toller, under *friþ*.) The word has further the sense of a cessation of hostilities as the result of

a treaty agreed upon by two parties and binding upon both. Thus the Danish herald in the Battle of Maldon states the terms on which Byrhtnoþ should *niman friþ æt us* 39, while 'we', that is, the Danes, *willað mid þæm sceattum us to scipe gangan, / on flot ferman, and eow friþes healdan* 40-1. The word does not appear to mean 'state of peace, amity' in precisely the sense apparent in some of the passages in the Brut. In the dying speech of Byrhtnoþ, who prays that his soul may *mid friðe ferman* into God's keeping, the word implies freedom from attack by evil spirits, to which he specifically refers. (Maldon 175-80.) The phrases *þonne nam mon grið and frið wið hi*, and *for eallum þissum grið and friðe*, occur in the Anglo-Saxon Chronicle (Laud MS.) under the year 1071. Again, in Maldon 35, the Danish herald says: *we willað wið þam golde grið fæstnian*, using *grið* in precisely the same sense as *frið* a few lines later as quoted above. It will be noted that Lazamon uses the phrases *grið niman*, and *frið healdan*, where in Old English *friþ* would be used in both cases; also that the word practically always occurs in association with *grið* (which always comes first, as in Old English), although the meanings of the combination vary somewhat.

Wið Malin his broðer he nom grið : and bi-hahte to halden frið I.108.3-4. Here perhaps there is a shade of difference, the latter word expressing 'state of peace, peacefulness, amity'. As a rule the passages containing the word refer to a state or condition rather than to an act or process, and *grið and frið* might be rendered 'peace and concord'.

He makede swulc grið : he makede swulc frið I.181.18-9; *he wes king and heo quen : and kine-lond heo welden . inne griðe and inne friðe : and freoliche loueden* I.9.1-4; *al Brutaine heo wuste (= OE wisode): wel mid þon beste . inne griðe and in friðe : wun wes on folke* I.106.21-4; *he welde þas riche . inne griðe and in friþe* I.165.4-5; and *setten grið and setten frið* II.210.21; *hu he twelf zere : seoðen wuneden here . inne griðe and inne friðe : in alle uæzernesne* II.531.10-13; *her wæs grið her wes frið : and freo lazen mid folke* III.150.20-1. In the following the reference is perhaps to a state of mind rather than to social conditions:—*þa ich hehte alle cumen : mid griðe and mid friðe and mid lufe* III.270.16-7.

As pointed out in Part I (under *frið*) the O text appears not to have this word, though it retains *grið*, and at least three times substitutes Fr. *pais* (in *pais* and in *griðe*).

GRID. Only those passages where this word occurs apart from *FRIÐ* (q.v.) will be dealt with here.

Whereas *frið* is Old English and West Germanic in origin, *grið* was borrowed from Old Norse during the Danish incursions. It appears that

the word was more familiar than *frið* to the scribe of the later MS. of the Brut. Bosworth-Toller defines *grið* as 'peace limited to place or time, truce, protection, security, safety'. In a specific and technical sense the word implies immunity from arrest or attack, in churches, private houses, king's palace; on great fasts and festivals and important public occasions; protection enjoyed by the clergy, nuns, and widows. (See B.-T. under *grið*.)

In those passages in the Brut where the word is used independently of *frið*, it is possible to distinguish several shades of meaning.

It may imply (i) a pact or treaty of peace, which one of the parties may 'hold' or 'break'; (ii) a truce, a cessation of hostilities; (iii) personal favour, privilege, protection from attack, etc., which powerful persons are entreated to grant; (iv) a state of peace, peaceful conditions, under which one may 'dwell'.

These may be illustrated in the above order.

(i) *Wheþer heo walden hælden grið* I.60.18; *Ða aræste here vnfriðe : ouer al me brac þene grið* I.172.7-8; *Arður . . . hehte hine halden god grið* II.555.2; and *zif Penda þat grið breke* III.262.3.

(ii) *3if he hine wolde wid him fihten . oðer grið makien* III.41.2-3; *Nu ich wulle zifen him grið* II.452.24.

(iii) *Des kinges grið wilniæn* I.254.6; *he wold . . . zirnen þeos kinges grið . and mid griðe sende : Uortigerne to londe* II.193.14-6; *Lauerd, lauerd, zef me grið* III.35.16; *alle heo zirnden his grið* III.159.19.

(iv) *Inne grið þurh alle þing : wunede Lucas þe king* II.2.3-4; and *ælche monnen bi his life : ich hate grið luuien* II.285.10-11.

Grið is at least twice coupled with *sæhtnesse* q.v.

SAHTE, SÆHTE, SEHTE, 'reconciliation, peace'. OE *seht* 'a settlement, an agreement, terms arranged between two parties by an umpire; peace between two powers' (B.-T.). This word seems only thrice to occur in the Brut otherwise than in combination either with *sibbe* or with *some*, or with both, and in one of the passages which form the exceptions, *sæhte* is contrasted with *unsibbe*, while, in another, *sibben* occurs as an echo in the first half of the next line. Of these three words so closely united in meaning, and by alliteration, none is much used by Layamon unassociated with one or other of the remaining members of the trio. These alliterative formulae are found in Old English, and Bosworth-Toller cites *syððan seah and sibbe mycelre tide betwyh ða ylcan cyningas and heora rice awunode*, from Bede Bk.6.21. (See other instances under the several words.)

(i) *Sæht* associated with *sibbe*:—*Ðo þa pre breðeren hefden þis lond :*

þa luueden heom þeos leoden . mid sibben and mid sahten I.90.22-91.1; *heo duden al þus þer . mid muchelere sibba : mid mochelere seahhte* I.156.7-9; *al þat winter heo wuneden here . mid sæhte and mid sibbe* I.382.17-8; *sæhte and sibbe he luuede* I.260.7; *þenne mæze we libben : mid sæhte and mid sibben* II.53.23-4, and 59.10-11; *þat he was icumen : swa fader sculde to his sune . mid sibbe and mid sahte* II.209.5-7; **and beon we on sele : and motegegn of sahte . nu (read hu?) we mæzen mid sibben : ure lif libben* II.213.13-16; *(ich wulle) halden þe for lauerd . mid sæhte and mid sibbe* II.47.7-8.

(ii) *Sæht* associated with *some*:—*and swa he nom enne dai : þat come heore drihtliche folc . to makian saht and some bi-tuxen him and his broder* I.108.5-8.

(iii) *Sæht* associated with *sibbe* and *some*:—*Heo speken þer to sæhte : to sibbe and to some* I.175.3-4.

(iv) *Sæht* used independently of *sibbe* or *some*:—*zif þu and pine þer wurðeð dæd : þeonne beo ich wið mine sune iued . betere weore sæhte : þene swulc vnisibbe* I.419.22-420.2; *Heo speken to-somme : and spileden mid sehte* I.364.3-4.

It would seem from the above passages that *sæhte* when joined by *and* to either *sibbe* or *some* usually combines with these words to express a single idea, and that rather a state, than an act, of agreement and peace. In the passage cited in (ii) above, however, *saht* and *some* may perhaps imply 'an agreement, a pact of peace'. In the first passage quoted under (iv), and in the asterisked passage under (i), *sæht* seems to mean specifically 'reconciliation', the word appearing to be distinguished from the following *sibben*: 'Let us discuss a treaty' (the act) 'and how we may live our lives in peace' (the resultant condition).

SÆHTE adj. 'reconciled'. Cp. OE *hi wurdon sehte on þa gerad ðæt...* Chron. 1093 (B.-T.)

To-gædere heo comen : and sæhten heo weoren sone I.406.22-3; *Ða wile þa heo weoren sæhte : and heore men on some* I.306.16-17; *and seoððen adun seten : sæhte to borden* II.538.7-8.

SÆHTNESSE (i) 'peaceful agreement'; (ii) 'state of peace'.

(i) *And al hit þuncð him wel idon : zif þu his sæhtnesse wult under-fon* I.352.22-3; *þe king heom hauede al for-rad . þe nold sæhtnesse aforon : at his mæie Androgeum* I.372.6-8; *þat isæhtnesse : mid treoðe hafde isemed* II.29.15-16; *zernen þis kinges grið . setten sæhtnesse* II.378.11-12; *þat we bidden Arðures grið : and sahtnesse him wurcen wið* II.447.23-448.1. The sense of the last two passages seems to be 'ask a truce, and make a treaty'.

(ii) *Næfde þa sehtnesse ilast : buten seouen zere urist* III.209.14-15. Probably *sæhtnesse wrohte* means 'established a state of peace' in the following context:—*He sette þis lond : he sahtnesse wrohte . he sette stronge lawen* I.119.12-14.

SIBBE 'friendship, amity; peace, concord'. OE *sibb* 'kinship, relationship' (the fundamental meaning); 'kindness, friendliness; peace as opposed to war; concord as opposed to dissension; security, freedom from molestation; peace of mind, freedom from fear, etc.'

This word is often closely associated with *sæht* in the Brut, as shown under the latter; it is twice no less closely combined with *some* as will now be illustrated.

(i) *Sibbe* in connexion with *some*:—*ich zifuen him mine dohter Genuis . to sibben and to some* I.406.1-2; *to sibbe and to some* occurs in I.175.4, a passage quoted under *sæht* (iii). The phrase *sibbe and some lufie man georne* is cited by B.-T. from Wulfstan, also *to sibbe and to some* in a charter in Thorpe.

(ii) In one passage the combination is with *sæl* 'happiness':—*and seo ð ðen uaren to heore ærde : mid sibbe and mid sæle* II.210.9-11.

(iii) Independent use of *sibbe*:—*Wha swa wulle libba : [h]alde þas sibba . and zef o man hit wille breken : on ueste it bide iwreken* I.155.19-22; *cumen al mid sibben : and her heore lif libben* I.254.9-10. In the first of these passages the word seems to mean 'state of peace' which is to be preserved; in the second, 'peace of mind', or 'friendly feelings'.

SOME 'reconciliation; concord'. OE *sōm* has the same senses. Various passages in Old English are cited by Bosworth-Toller in which the word is combined with the alliterating *sæht* or *sibb*, (see under these words above) and also with *sæhtnesse*. In the Brut the word seems not to be used except coupled with either *sæht* or *sibb*, and in one case with the adjective *sæhte*. The passages where these combinations occur will be found above under these several words.

WEOLE, WELE 'good fortune, prosperity'. OE *wela*, *weola* 'wealth, abundance, prosperity'.

For eowre muchele wurð-scipe : weole ze scullen habben I.330.12-13; *he heom wolden mucle wele : and wurðscipe itæchen* II.8.14-15.

§12. MISFORTUNE, MISERY, GRIEF ETC.; INJURY INFLICTED

Most of the words about to be considered express sometimes a state of mind, sometimes unhappy circumstances and general state of misery, and again, wrongful action, outrage etc., or a wrong suffered.

ÆRMÐE 'misery; wrong' etc. OE *iermþu*, *ermþu* 'poverty, misery, woe'.

(i) 'Misery, wretchedness':—*Ða wes Ænglene lond : mid ærmþe of-fulled . her wes wop and her wes rop : and reouðen vniuoze* II.434.5-8.

(ii) 'Injury inflicted, havoc, outrage, cruel treatment':—*wunderliche to-dreued . þurh þene muchelne æie : and þurh þe muclen ærmðe . and þurh þene mucle hærm : þa Hengest heom wrohte* II.252.9-13; (*Ðet tidende com*) *þat þer wes icumen Arður : and ærmðen iwrohte þer* II.514.11-12; *þenne wille ich Oswy anan : mid ærmðen igreten . driuen hine of londe* III.267.1-3.

(iii) 'Injury, wrong, suffered':—*ich am mid ærmðen abroken* I.31.14.

(iv) 'Hardship, difficulty, afflicting circumstances':—*Eneas þe duc : mid ermden at-wond* I.5.6-7.

BALU 'woe; destruction; strife, death' etc. OE *bealu* 'woe, harm, mischief; wickedness'.

This word is several times used by *Lazamon* to express misfortune, misery, destruction, arising as a result of battle or invasion:—*beornes þer fullen . balluw þer wes riue* I.192.1-2; *he leaðde an his honde : enne bowe stronge . and he þene streng up braid : balu com on ueste* I.62.7-10; *Ða isezen Bruttes : þat balu wes on londe* I.91.19-20; *balu wes on folke* II.379.19, and III.95.10; *Bruttes heom after buzzen : and mid baluwe heom igrætten* I.78.1-2; *and he hit scal abugge . and þer uore ibiden : bitterest alre balewen* III.217.16-18; *þer uore þu abidest : alre baluwene mæst* II.248.17-18. In several of these passages the word has the force of 'death'. Death as the result of a shooting accident is referred to in—*to his sune he heo draf* (that is, a herd of deer) *him seolue to balewe*—for he was killed by his son's arrow (I.14.9-10). The word is also used for the untimely death of a young woman, the mother of Brutus, in childbirth.—*Ða þe time com : þat þe cnaue wes iboren . in þere burhe : þa brude deade iwearð . þe child wes iboren isund : to baluen his moder* I.13.14-19. The meaning is 'strife' in:—*Ðær aras muchel ballu : bi-twenen þissen broðeren* II.11.8-9.

BURST 'loss, disaster'. Also in Old English, *byrst*; cp. *we habbaþ fela byrsta gebiden* *Wulfstan*, *Serm. I*.

Lazamon uses the word fairly frequently in the sense of 'calamity, misfortune':—*We habbeð ihaued moni burst : moni hunger and moni þurst* I.265.19-20; *ærm on his mode . seorhful on heorte : for his muchele burst* I.282.2-4; *vnder þissere blisse : þer comen muchele burstes* I.104.13-14; *Colgrim þe kene : and moni þusend of his iueren . þa ofte ure Bruttes : makeden hufele burstes* II.409.20-3; *balu wes on uolke : þe burst*

wes vnimete III.95.10-11; and *hu heore fader wes of-slaȝe : and idon of lif-daȝen . and hu Bruttes to-dreued weoren : mid feole cunne bursten* III.146.12-15.

CARE 'sorrow, grief, care; distress, difficulty'. OE *cearu*, *caru* in same sense:—*Oft ic sceolde ana uhtna gehwylce / mine ceare cwipan* Wanderer 8-9; *cearu wæs geniwod, / geworden in wicun* Beow. 1303-4.

Lazamon employs the word with slightly different shades of meaning:

(i) 'State of sorrow, grieving':—(*him sæide Mærlin*) *þat sculde beon unimete care : of þas kinges forð-fare* II.545.16-17; *þat Merlin seide whilen . þat weore unimete care : of Arðures forð-fare* III.145.8-10; and *bringen eou sorwen an kare* I.232.23.

(ii) 'A personal grief':—*al of mine forð-fare : and of mire unimete care* III.294.21-2.

(iii) 'Labour, toil, difficulty':—*heo þoleden wensiðes . ant mid muchelure care : heo to londe bi-comen* I.5.23-5.

MOD-CARE 'grief, sorrow of heart'. OE *mod-cearu* in same sense:—*ic þære socne singales wæg / mod-ceare micle* Beow. 1777-8.

Ða Vortiger þis hæued isæh (OE *hēafod*) : *þa hælde he to grunde ful neh . swulc he hafuede mod-kare* II.148.12-15; *Mid muchele mod-kære : Hengest gon awæxi uaren* II.194.14-15.

HAP 'fortune, chance, in general'. *His hap wes þa wurse* I.164.13; *his hap wes þe betere* I.208.21; *in æwer ælche happe* II.340.7.

'Bad fortune':—*ne com nauere wurse hap* (of a disaster at sea) II.75.21.

HÆRM 'harm; injury; affliction' etc. OE *hearm* expresses (i) an injury inflicted by word or deed:—*no he mid hearme of hliðes nosan / gæstas grette* Beow. 1892-3; *Ær hi to mycelne hearma gedydon* Dan. 458; (ii) an injury suffered, an affliction:—*ealle synt uncre hearmas gewrecene, / laðes þæt wit lange þoledon* Gen. 759-60; *nu min ealdor ligeð / for-heawen æt hilde; me is þæt hearma mæst* Maldon 222-3.

The word in the Brut has the senses: (i) 'an injury inflicted, an outrage':—*and fuhten wið his leoden . mid fure and mid here : mid feole kunne hærm* I.91.20-2; *andswlcne hærm in þon londe : dude Humber þe stronge* I.92.9-10; *hermes he worhte* I.163.2; *Ðu hauest a þisse londe : ure leoden aslæȝen . mid hungere and mid hete : mid feole cunne hærm* II.495.21-4; *wel reordi feond . and inne Brutaine : bisi wes to harme* III.17.23-18.2.

(ii) 'Injury suffered, misery, afflictions':—*þa heo weoren icumen hidere : for Ardures hærm* III.130.10-11; *ȝif we heom hereden : þat was for ure hermen* II.496.10-11; *Her wes hunger and hete : her wes alre hærmene mest* I.172.15-16.

LAD, LOÐ 'pain, trouble, annoyance' etc. OE *lāþ* 'something which is hateful; pain, suffering, grief, enmity' etc.:—*we him on þam lande lað gefremedon* Gen. 392; *Nis þær on þam londe . . . ne lifes lyre ne lapas cyme* Phoenix 50..53. In the Brut:—

Du hauest heom muchel uel idon : and nu þu most þat lað onfon II.249.10–11; *al swa heo wolden heora lauereð : from loðen alesen* I.46.19–20.

LADDE, LÆDDE 'enmity, hostility, malice'. OE *læððu* 'injury, enmity, malice' etc.:—*cow is wuldorblæd / torhtlic toweard ond tir gifeðe / para læðða, þe ge lange drugin* Judith 156–8.

The word is rare in the Brut:—*heo nolde ipolian : for alpeodene gold . þat þeos laððe weore : bi-tuxe Corineo and Locrine* I.98.22–99.1; *Mid muchele læðe : þene castel heo bilæien* II.360.5–6.

PINE 'suffering, pain'. OE *pīn*, early loan-word from Latin *poena*, *pēna*.

Ofte heo hæfde seorwe and pine I.106.18; *uppen þere sæ brimme : þer Hengest þolede pine* II.191.22–3.

PLIHT 'misfortune, disaster; evil plight'. OE *pliht* 'danger'. The sense in the Brut is certainly rather that of misfortune already present, than of danger to come. *Ðre dæzes hit rinde blod . þreo dæies and þreo niht : þat wæs swuþe mochele pliht* I.166.4–6 (said of a serious flood); the last half-line occurs again II.446.10; *Poreus lai on bure : þer him muchel plihte ilomp* (he was murdered by his mother) I.170.21–2; *þer fore þu scalt habben pliht* I.315.2; *help us nu for þu miht : ælles we habbeoð muchel pliht* II.108.19–20; (*Ich æm icumen*) . . . *for suggen þe tidende : þe beoð icume to londe : of swiðe muchele plihte* II.131.23–5.

Perhaps in the following *for nane pliht* should be taken as 'not as a menace, not to make mischief':—*ne com ich to þissen londe : to halden fiht stronge . ne for nane pliht* II.131.22–5.

REOUÐE 'misery; grief', formed from OE *hrēow* 'sad, sorrowful', or from the noun meaning 'sorrow' etc. The word seems never to mean 'pity', or 'ruth' in the Brut.

An his dazen ilompen : reoðen on leoden III.278.23–4; *þer wes wop þer wes rop : and reouðen vniuhze* II.567.15–16; *þer wes wop : þer wes rop : and reoðen vnimete* II.98.22–99.1*; cp. also under *ærmðe* (i); *þa þeo Rom-leoden : riden toward scipene . and Bruttes bilafden : inne þisse londe . mid vnimete reoðe* II.99.2–6; *þus heo weoren for-radde : mid reowðe þan mæste* II.80.20–1; *þa wes muchel reoðe . . . to folke* II.117.12–13.

SÆR, SAR 'sorrow, grief; injury'. OE *sār* is used both of bodily injury, disease, wound, etc.:—*wop gehyrdon, / gryre-leoð galan Godes*

ondsacan, / *sige-leasne sang*, *sar wanigean* Beow. 785-7; and also pain of mind, spiritual injury:—*sar eal gemon* / *synna wunde þe ic siþ oððe ær* / *geworhte in worulde* Jul. 709-11.

The word in the Brut seems practically identical in meaning with *sorþe* with which it is sometimes coupled. It has the senses 'sorrow, grief', and also 'injury':—*an heorte he hafde sorþe and sar* I.341.18; *Nu þu hauest iherd mi sær : lauerd Julius Cesar* I.361.21-2; *heo driuen hine of þis ærde . mid seorwen and mid seore* I.293.17-18; *an þu mi muchele swinc : mid sare forþeldest* I.97.17-18.

SORþH 'sorrow; calamity; injury'. OE *sorh* has various shades of meaning:—'grief': *Swa Wedera helm / æfter Herebealde heortan sorþe / weallinde wæg* Beow. 2462-4; 'calamity, tribulation': *swa me her gelamp / sorh on siþe* Jul. 442-3; 'injury, wrong': *Holofernus . . . þe us monna mæst morðra gefremede / sarra sorþa* Judith 180-2.

Lazamon seems to use the word: (i) of bodily discomfort, hardship, etc. in:—*þa wes ich al wet : and weri of sorþen and seoc* III.121.10-11.

(ii) 'Sorrow, grief':—*þer wes sarinesse : soreþen inoþe* III.98.20-1. The last three words are repeated several times, e.g. III.137.4; I.108.13, etc.; *ofte heo hæfde seorwe and pine* I.106.18.

(iii) 'Injury, outrage':—*mid sweorde leggeð heom on . and wrækeð wel an ærde : þe seorþe of ure lauerd* (i.e. the injuries which were inflicted on him) II.148.21-149.2; *of þare sorþe ful iwis : þe eow duden Melgan and Wanis* II.95.22-3.

(iv) 'Disaster, tribulation, calamity':—*seorwe þe beoð geueðe . ne scal þe nan man scilden : wið scondliche deaðe* I.96.16-18; *wiðer heo weoren beien . slezht and muchel seorwa* I.107.21-2; *for þan vnmete sorþen* (= 'on account of that immense calamity', referring to a disaster at sea involving great loss of life) II.75.18.

SCAÐE 'injury, harm'. ON *skapi*. Madden does not distinguish this word in his glossary from *scaðe* 'enemy, monster', from OE *sceaþa*. See below under SUPERNATURAL BEINGS.

Swa þerimiewulf . þane he wule on scheapen : scaðe werc wrchen I.66.5-7; *heo uerden norh heo uerden æst : al þat lond heo makeden west . heo ferdn into Scotlon : þer heo scaðe worhten* II.16.19-22; *Wanis wes in Hungrie : þer he harm worhte . Mælga wes inne Scise : þer he scaðe makede* II.76.22-77.2.

TEONE 'wrong, injury; affliction' etc. OE *tēona* 'annoyance, damage, hurt, mischief suffered':—*to teonan cristenum folce* Elene 988; 'wrong done, injury inflicted':—*Ðæt he gepence ðam teonan ðe we him dydon* (said by Joseph's brethren of Joseph) Book of Genesis, L. 15.

The remark of Bosworth-Toller that in later English the sense of this word is restricted to 'pain, vexation' is hardly true of *Lazamon's* usage:—

(i) 'Injury inflicted':—*heo duden Maximiene : vnimete teone* II.56.4-5. See also the line marked * in (ii).

(ii) 'Injury suffered':—*toward Rome he wolde riden . to wreken his teone : on Gracien and on Valentin . þe monie him hæfden idone : *teonen inne Rome* (teonen in the last half-line perhaps belongs rather under (i)) II.62.21-63.2; *wreken he wolde his teonen : and Turnus his wine leoue* I.74.5-6.

(iii) 'Grief, distress of mind':—*Ða hæfde þa Troinisce men : ouercomen heora teonen . þa weoren heo bliðe : on heora breost-þonke* I.82.9-12; *teona wes on hirde* I.98.16.

(iv) 'Calamity, misfortune':—*Weorre makede Turnus : mid teonen he wes idrefed* I.8.14-15; *þe mid teonen wes to-drefed* I.15.6; and *weoren alle twiræde : heore teone wes þa mare* II.391.9-10.

(v) 'Difficulty, hardship':—*Ða Grickes hefden Troye : mid teone biwone* I.4.13-14.

UNSEL 'unhappiness, misery'. OE *unsæl*, contrasted with *bliss*:—*þa deoflu wæron on miclum unsælum, ond þa englas wæron on swiðe micelre blisse*, cit. B.-T. from *Wulfstan* (ed. Napier) 236.26.

Unsel him wes on mode III.226.11; *þa Scottes weoren todeled : mid muclen vniselen* II.491.10-11. In the latter passage the word has the sense of 'calamities'.

UNSELÐE (i) 'Unhappiness'; (ii) 'misery caused to others; ill-deeds'. Not recorded in B.-T.

(i) *Mid his folke he fleh . al toward þare sæ : mid muchele vnsælðe* I.202.15-17.

(ii) *slezht and muchel seorwa : al for heora uniselðe* I.107.22-3.

WA. OE. *wā* used adverbially, frequently in such constructions as:—*monige hwile bið þam men ful wa* Gen. 634; *him bið wa on his mode þæt* . . . *Ælfric's Metr. Lives of Saints*, I.17.167; further as interjection:—*Wa me forworhtum ! nu is wen micel / þæt heo mec eft wille earmne gehynan* Jul. 632-3.

Lazamon follows the Old English usage:—

(i) As adverb:—*Wao wes Brutus þer fore . wa wes him on liue : þa þe fader wes on deaðe* I.14.16-18; and *ælches weies him wes wa : a þissere weorlde-riche* II.361.2-3; *swa swiðe wa him was : þat al his wit he for-læs* I.71.1-2; *wrake wes on londe : wa wes þone vnstronge* I.172.13-14.

(ii) As interjection: 'ill betide, woe worth':—*Wa worðe þan monne* I.142.22; *a wurpe þe wa* I.163.15; *wa wrðe heom for þon : þat heo iboren weore* III.223.11-12.

MS. C seems never to use the word as a noun, but the later MS. has *Wynchestre wo þe comeþ to III.137.13*, where C writes *Ærm wurðest þu Winchæstre*. See *wæne* below for the noun.

WÆNE 'destruction, harm, misery, woe'. This word appears to be a new formation from the inflected forms of OE *wēa* 'affliction, misery':—*ne mihte snotor hæleþ / wean onwenden* Beow. 190:1; *twelf wintra tid torn gepolode / wine Scyldinga, weana gehwelcne* Beow. 146–8.

Lazamon uses *wæne* in the sense both of 'destruction, misfortune', and of 'grief, an affliction':—*þer ich wulle wunie : and þolie þeos wænen . ane lutele stunde* I.146.9–11; *þiderward wende þe kinge : him seolue to wæine* I.275.16–17; *þeo cnihtes weoren vnwepned : þa þe wæne heom wes zeueðe* I.241.4–5; *wane wes on folke* I.93.12; *wæne com on ueste* I.401.6.

WANSIDE, WENSIDE 'hardship, misery, calamity, disaster', formed from *wæne* q.v. The compound **wēasīþ* is not recorded in Bosworth-Toller, though *wēagesīþ* 'companion in sorrow' occurs.

The word is used by Lazamon to express objective misfortune, and is not applied to subjective grief.

Ðu hauest a þisse londe : ure leoden aslæzen . mid hungere and mid hete : mid feole cunne hærmen . mid wapnen mid wæteren : mid feole wan-siðen II.495.21–496.1; *georne heo hine beden : þat he heom scolden ræden . hu heo mihten awræken : heore wansiðes . vppe Maxenze* II.39.7–10; and *þu scalt worðen wræchen : and wunien in wansiðe* I.131.7–8; *mid wolcnen and mid wedere : heo þoleden wen-siðes* I.5.22–3.

WIÐER-HAPPES 'calamities, misfortune'. This compound is not recorded in Old English, nor by Stratmann-Bradley in Middle English elsewhere than in Lazamon.

Ah he ne mihte speden . þar aros wale (for walc) and win : and wiðer-heppes feola I.18.6–8. The word seems also to have the sense of 'struggle, conflict':—*no nenne hærm þer don heom : i þan wiðer-happen* III.57.19–20. The precise meaning is not at first quite clear in *Hamund bi-heold Wiðer : and his wiðer-happes* I.395.11–12. In this passage there is no question of Wither's 'misfortunes', at least not of any suffered by himself. It is rather a matter of misfortunes inflicted by Wither upon others, and the sense seems to be 'depredations, outrages'.

WRAKE 'misery'. OE *wracu*. Cp. *nis þær on þam londe lað geniðla, / ne wop ne wracu, weatacn nan* Phoen. 50–1.

The word refers in the Brut specifically to the misery which results from warlike disturbance and unrest:—*elc mon ræuede oðer : þeah hit weren his broðer . wrake wes on londe : wa wes þone vnstronge* I.172.11–14.

§13. STRIFE, QUARREL, DISPUTE

The words included in this section are separated from those signifying specifically 'war, battle' etc., because some of them at least seem to refer to wrangling and bickering rather than to actual fighting. It may be admitted that in the state of society depicted in the *Brut*, where there was a quarrel, a fight was not far off, and the two are not always readily distinguishable. For this reason some might prefer to include most of the following words under *War and Battle*.

FLIT 'dispute'. In Old English the word (oftener *geflit*) may express a wordy dispute or discussion, also a friendly combat, or trial of skill, as in *Beowulf* 865, where it refers to horseraces, and jumping competitions; further, 'strife' generally, not involving blows. It is apparently used in this latter sense by *Lazamon*:—*Ða iherde Arður : þat flit of þissen eorlen* II.627.7–8. It does not appear that blows had yet been struck. *MS.* Otho substitutes the French *strif*.

SAKE 'strife, quarrel'. OE *sacu* has the same sense:—*ne synn ne sacu ne sar wracu* *Phoen.* 54.

Seoððen sweoren þeines : seoððen sweoren sweines . þat heo nauere mare : þe sake nulde arere II.537.20.23; *Nu is hit muchel leod-scome : zif hit scal þus a-ligge . bute þer sum sake beo : ær we iwurðe sæhte* III.45.8–11.

UNFRIÐ 'hostility, strife, unpeaceful conditions'. *Lazamon* uses the word on several occasions.

Membriz hefde inomen þat grið : ah sone he makede unfrið I.108.11–12; *in al þan londe nas na grið . ah mid vnfriðe þer wes muchel win* II.56.1–2.

UNSAEHT 'strife, variance'. *Wulleð Romleode : cumen to þissere þeode . . . and maken vnsæhte : and binimen us ure irihten* II.53.5–6, 9–10.

WALC 'strife, turmoil'. OE *gewealc* 'rolling, tumbling motion':—*yða gewealc* *Beow.* 464, and elsewhere in OE poetry. In the very earliest Middle English, however, the word is used in association with *gewin*, in the sense of 'turmoil, unrest, strife', *Laud Chronicle* (ann. 1100):—*Togeanes þan he manega gewealc and gewinn hæfde*. See *Plummer's Edition*, 1.236.

It is interesting to note that the alliterative phrase *walc and win* occurs twice in *Lazamon*. These passages are quoted under *WIN* below. In the passage in which *Pantolaus* describes the wanderings and misfortunes of himself and his followers—*sæwerie men : mid wedere bi-driuene*—*walc* has the original sense of 'rolling, pitching and tossing'. He says:—*We habbeð ihaued moni burst : moni hunger and moni þurst . moni walc moni wind : bi wilde þisse watere* I.265.19–22. If by any

chance *wind* were here written in the MS. for *win*, the sense of *walc* would be simply 'trouble, agitation'.

WIN, IWIN 'strife, struggle'. OE *gewin* is used (i) of the trouble caused to Hrothgar and his people by the incursions of Grendel:—*wæs þæt gewin to strang / lað and longsum* Beow. 133.-4. It refers also (ii) to a struggle against adversity:—*ne wædle gewin* Phoen. 55, (iii) to actual battle:—*ær þan þe he to þam gewinne come*, Ælfric's Life of Oswald, referring to his fight with Ceadwalla, and (iv) to mere bickering and wrangling:—*þær bið swyðe mycel gewinn betweenan heom* (i.e. between rich and poor in Estland), Wulfstan's Voyages, in *Orosius*.

In the Brut the word expresses various degrees of hostility in feeling and action.

(i) It is combined with *walc* in:—*ah he mihte speden . þar aros walc* (MS. *wale*) and *win* : and *wiðer-heppes feola* I.18.6-8; *bitweonen heom aræw walc and win* I.107.20. The sense here seems to be rather 'quarrel, unfriendly feeling and conditions', than hostile action. (It is just possible that the MS. reading *wale* 'slaughter' should stand in the first passage.)

(ii) In the following the sense seems to be rather more definitely practical:—*ne bilæfde he næwer nænne : of Androgeus cunne . þat heold feht and iwin* I.385.21-3; *Maximien þe wel idone . haldeð swiðe muchel iwin : wið Gracien and wið Valantin* II.52.21-3. See also the passage in II.56.2-3 cit. under UNFRID above.

(iii) 'Struggle against adverse circumstances, labour':—*Nulle we nauere þider faren . to þolien þat swunc and þat iwin aʒæn þat heðene cun* II.102.5-7.

§14. RICHES AND POVERTY

No abstract nouns for these occur in the Brut. *ÆRMÐE* has already been dealt with (see §12) and never has the sense of 'poverty'. We have to consider only adjectives, often used as nouns, for 'rich' and 'poor'. For the former the commonest word is *riche*, and once, *weoleʒen* 'the rich'. For 'poor', by far the most usual word is *hæne*, and the archaic *weðlen* also occurs three times. As these words usually occur together, and contrasted, it will be convenient to deal with them together in the above senses, and discuss other meanings afterwards.

The Old English usage may be considered first.

OE *ricc* means originally 'powerful, possessed of authority and dominion'. The Danish messenger in the Battle of Maldon addresses Byrhtnoth, and tries to make terms with him, as being the most im-

portant man present, and having most authority:—*we willað wið þam golde grið fæstnian / Gyf þu þæt gerædest þe her ricost eart, / þæt þu þine leoda lysan wille* Mald. 35–7. From the conception of ‘power’ to that of ‘wealth’ the passage is easy, and already in Old English, and before French influence, there are passages cited in B.-T. in which *riçe* means ‘wealthy’:—*se rica biþ namcuðre on his leode ðonne se þearfa Ælfrie*, Hom. (Thorpe) i.330.6. *Rice* is also contrasted with *hean*:—*þæs þe guman brucað / rice and heane* Riddle xxxiii.12–13. Whether this should be rendered ‘rich and poor’ or ‘high and low’ is a nice question. See also the passage cited below under *wædla*, from Ælfrie’s Life of Oswald.

OE *weliġ* ‘wealthy’, from *wela* ‘wealth, riches’; a very common word which requires no illustration.

OE *hēan* means ‘humble, lowly, abject’, but not specifically ‘poor’ until Late OE. We find it coupled with *earm* in *þa þu hean and earm / on þis orlege ærest cwome* Guthlac 425–6, where the latter word may mean ‘poor’. In the Laud Chronicle account of the Conqueror’s death (under the year 1086) it is contrasted with *riçe* in such a way as specifically to suggest the sense ‘poor’:—*se scearpa deaþ ðe ne forlet ne rice menn ne heane*. (See Plummer 1.219.)

OE *wædla* ‘poor, indigent’, cp. *wædl* ‘indigence’. The adjective has the sense of ‘lacking, in need of’:—*wurdon menn wædlan hlafes* Ps. 104.14; it is often used as a noun:—*he hine on wædlan hywe æteowde* Ælfrie, Hom. (Skeat) i.23.221; it is contrasted with *weliġ* in:—*he þone weligan wædlum efnmærne gedeð* Metr. Hom. 10.11, and coupled with *þearfa* ‘poor man’, and contrasted with *riçe* in:—*Swa hwæt swa him becom of þæs cyninges gifum oððe ricra manna, þæt he hraðe dælde þearfum and wædlum* Ælfrie’s Life of Oswald.

In *Lazamon*’s usage one or other of the words meaning ‘rich’ is usually contrasted with one meaning ‘poor’.

RICHE (i) contrasted with *wædlen*, *weðlen*:—*riche men and weðlen . al þat wapmon-cum* I.22.7–8; *for her scullen þe wædlen : alle i-wurðen riche* I.250.17–18.

(ii) Contrastd with *hæne*:—*and al þat ze of-take mazen : doh (sic) hit of lif-dazen . þa uatte and þa lene : þa riche and þa hene* III.84.13–16; *and hendeliche hit delde : alle þare duzeðe . þa him abuten weore : riche and henen* II.232.18–21; *þa riche he makede wrecchas : þa hæne hine awarieden* I.108.19–20; *Denne ne mai þe atwite : þe hæne ne þe riche* II.169.15–16; *his leondcnihtes alle . riche men and hæne* II.414.16–17.

(iii) *Riche* in the sense of ‘powerful’:—*Arður is þe kenneste mon :*

þat we æwere lokeden on . and he is wunder riche III.2.8-10; and *þas word sæide : Wahnain þe kene . Lucas þe riche : þu ært kæisere of Rome* III.48.1-4, etc., etc.

(ÐA) WEOLEȜEN 'the wealthy'. *Wapmen and wifmen : þa weoleȜen and þa weaðlen . alle he heom sumunde* I.19.6-8.

The word is used once as an adjective in the sense of 'powerful, mighty':—*þat is an weoli godd* II.157.7.

HÆNE (i) 'Poor'. See above under RICHE (ii).

(ii) 'Humble; abject, abased'; despicable; contrasted with *hæȝe*:—*Nu we mazen wepen : and wanliche i-beren . halden us for hæne : þer we weoren heȝe* III.215.20-3; *alle þa heȝe men : þe he hatede to dæðe . and alle þa hæne : mið harme he igrætte* II.38.8-11. The meaning is rather 'despicable' in:—*and þæt cristine hired : for hæne wes ihalden* II.180.1-2; *for heo me for-husce : and heo hold me for hæne* I.134.18-19.

WÆDLEN etc. 'poor', occurs only contrasted with *riche* (see above under RICHE i), or with WEOLEȜEN q.v.

CHITIMACHA VERBS OF DEROGATORY OR ABUSIVE CON- NOTATION WITH PARALLELS FROM EUROPEAN LANGUAGES

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The language of the Chitimacha Indians of southern Louisiana is now practically extinct.¹ Although there may still be as many as a hundred Chitimacha Indians living in Saint Mary's Parish, Louisiana, practically all of these now speak French or English or both and only two individuals remember the old language. These are Chief Benjamin Paul, aged 65, and Delphine du Cloux, aged 59. With the aid of these two, especially the former, I studied the language last summer,² continuing the work begun by the late Dr. Albert S. Gatchet and carried forward by Dr. John R. Swanton of the Bureau of American Ethnology.

The language employs the following phonemes:³

Consonants						Vowels				
						ə				
p	t	ts	tc	k	'	i	e	a	o	u
p'	t'	t's	t'c	k'		i·	e·	a·	o·	u·
		s	c	h		Semi-vowels				
m	n	ŋ				y	w			

Short vowels are reduced to ə except in root and prefix syllables and under the accent. The accent is a function of the sentence and falls on the last syllable in the word or word group, but imperative and interrogative verb forms take the accent on the penult. The structure of the

¹ This paper was read before the Linguistic Club of Yale University at the January 1933 meeting and has profited from general discussion by the members present.

² The work was carried on under the sponsorship of the Committee on Research in American Native Languages.

³ c represents the sound of *sh* in Eng. *ship*; *tc*, the sound of *ch* in Eng. *church*; *p'*, *t'*, *t's*, *t'c*, *k'* are glottally affected surds. The remaining consonant signs are perhaps self-explanatory. The vowels vary somewhat in quality according to phonetic surroundings, especially *e*, *e·* which varies between the phonetic value *e* of Fr. *été* and *ä* of Eng. *cal*.

language is isolating with respect to the noun, synthetic with respect to the verb. Relations are expressed by word order and by post-positive syntactic particles. Characteristic processes are noun compounding and the employment of several types of verb auxiliaries.

Early in my work with Chitimacha, I learned from my informant that there was no such thing as swear words in the language, that the nearest one could get to calling someone else names was to call him *so 'atin* 'big foot', *ca 'atin* 'big mouth', *wa'ac kamək'i* 'long ears', or something similar. Later I learned that the language afforded its speakers a means of expressing displeasure in the form of a well-marked set of verbs having derogatory or abusive connotation in certain contexts.

The function of the abusive verbs covers a range of nuances including open insult, sarcasm, action despite another, displeasure, playful abuse, and coarse speech without special overtone. These nuances remind us immediately of the similar range of usage of abusive language in English, for rough language in English is used playfully as well as insultingly, and, in the speech of some, it is simply used at every opportunity regardless of whether or not the normal connotation is to be conveyed. In one nuance, the Chitimacha may be different from English, namely, in that of action despite another.

him hutəŋki hikuytcwətcuk

means 'I'll get into your boat', but

him hutəŋki hikuyt'ətcuk

with the verb of abusive connotation means 'I will get into your boat (whether you like it or not)!' Still, it seems natural to become abusive when flouting the will of another, and so this Chitimacha usage may not be far from what often occurs in English.

The Chitimacha expletive verbs are not vulgar and there is no categorical taboo as to their use before women and children; nevertheless, they may be very definitely offensive to the person to whom they are angrily addressed. 'What would you do', I asked my informant, 'if you asked me to take you to town in my car, and I said,

hikúyt'a 'Hop in, dag-nab you!'

'Well', he answered, 'if you were my friend and I knew you were just joking, I would say.

hikuyt'ətcuk 'I will hop in, dag-nab me!'

But if you were a stranger, or if I thought you meant it, I would say, "Thank you, but I think I'll walk after all."

It is interesting to note that the use of the derogatory verb is as common in the first person as otherwise. Action against another's will is a frequent connotation, e.g.,

hihuhəmt'cət'anuk 'We'll crash in (despite the host)!'

hicant'ik 'I broke out (of jail)!'

The playful abuse value has been illustrated in,

hikuyt'ətcuk 'I'll hop in, dag-nab me!'

in response to the joking 'Hop in, dag-nab you!' I was further told that one often sped the departing guest, if he were an intimate friend on an informal basis, with

hikettic 'Beat it!' 'Va-t-en!'

whereto the other would reply in the same vein,

hiketictik 'I'm beating it'. 'Je m'en vais'.

Coarse speech without other special connotation seems to be illustrated in the following bit of narrative in which Rabbit explains to Bear, his partner, how he obtained a sack of meal: 'I saw women pounding corn; I went to where they had placed their infants and started beating these.

wetci:k'c hiketictuki, *we he:c 'utcpac 'ap'a:kəna'a*.^{3a} In order that I betake myself off, they gave me this meal.'

I am not able to illustrate a first person example of direct insult or sarcasm.

A few examples in the other persons illustrating the different nuances are:

cənt'a 'Scat out of here!'

cim't'ci:k' 'icnak 'They went (against my will and uninvited).'

'apcant'i:k' 'icpen 'He came in, the so and so!'

wetk we nekač kapnu:pkc pen hi'amna'a 'Then they saw that evil pest of a devil had died.' 'Da sahen sie dass jener Teufel krepirt war.'

'am kutnehin pehtcúyi 'What God would he be?'

This last is sarcastic: the goodwife has suggested that the poor tramp might possibly be God wandering about in disguise. The goodman is certain he is not God, but some old lazy lout.

The Chitimacha derogatory verbs consist of a) *ketic-* and *ketup-* 's'en aller', b) the copula and auxiliary *pe(h)-*, c) several verbs of motion characterized by the verbal determinants *-tə-* and *-t'cə-*.

The stem *ketic-(t-)* occurs most frequently with the directional prefix *hi-* (expressing motion away from the speaker) in the imperative *hikettic*, which my informant considered exactly equivalent to the French 'va-t-en', therefore roughly the same as our slang 'beat it!' or 'scram!'. *Hikettic* is irregular in lacking the final *-a* characteristic of

^{3a} Here *p'* designates [p] followed by a glottal stop, not, as elsewhere, a glottalized stop.

the imperative, which I did record in the forms with other directional prefixes, thus with 'ap- expressing movement towards the speaker,

'*apketica* 'Beat it for here!'

with 'apc- return movement towards the speaker,

'*apcketica* 'Beat it back here!'

with *kas-*, return movement away from the speaker,

kasketica 'Beat it back yonder!'

Outside of the imperative, the verb is carried through the conjugation without irregularity except in the progressive:

Aorist *hiketictik* 'I beat it!'

Progressive *hiketictcik* instead of *hiketict'actcik* 'I'm beating it.'

Customary *hiketictuykin* 'I habitually beat it.'

Future *hiketictcuk* 'I'll beat it.'

Closely related to *ketic-(t-)* is the form *ketup-*, imperative with *hi-*, *hiketúp* 'beat it'. The difference between *hiketíc* and *hiketúp*, according to my informant, is a matter of gender, the former being feminine, the latter masculine. Similar distinctions were pointed out elsewhere in the language, but the distinction seems to be in part, at least, theoretical.

Copula-auxiliaries in Chitimacha are four in number, distinguished in meaning, as Swanton has pointed out,⁴ according to the implied position of the subject, thus:

tci(h)- 'to be (vertically, standing, erect)'

pe(h)- 'to be (horizontally, lying down)'

ci(h)- fem. *hi(h)-* masc. 'to be (sitting or in indifferent position)'

For example:

hayki tci'i 'Here it stands.'

hayki pen 'Here it lies.'

hayki hi'i 'Here it is.'

But *pe(h)-* regularly has a secondary disrespectful connotation when applied to human beings. If *kapni'ki-k' tci'i* means 'He's sick standing; he's sick, but still able to get about,' then *kapni'ki-k' pen* ought to mean 'He lies sick'. It does have this meaning applied to a beast; but, applied to a person, it is only impolite. Politeness requires the use of the indifferent positional auxiliary, therefore,

ke'epki kapni'ki-k' hi'i 'He is sick in bed.'

Applied to humans *pe(h)-* does not necessarily imply horizontal position or any position, for that matter; thus, in the example already quoted,

'*am kutnehin pehtcúyi* 'What God would he be (the good-for-nothing tramp)?'

⁴ In unpublished notes placed at my disposal.

Applied to a person, *tcu'k'c pen* means, 'He went⁵ (the wretch)', not 'he went horizontally or on all fours' as it would mean if the subject were an animal. That a person went on all fours could be expressed only by circumlocution:

nat'i'k' hitcuyi'i 'Crawling, he went'.

The sentence,

haŋki 'icpeken 'Here I lie',

is derogatory; it amounts to speaking of oneself with no more consideration than one would give an animal or an inanimate thing and does not necessarily imply that one is really lying down at all. It is rather to be interpreted as 'Here I am (unworthy wretch)!' or it may be an expression of action despite another, equivalent to 'Here I am, despite you!'

The copula-auxiliary *pe(h)-* is singular only. There is no derogatory plural copula, nor is the position distinction made in the plural. *no(h)-* is the plural auxiliary corresponding to *tc(i)(h)-*, *hi(h)-*, *ci(h)-* and *pe(h)-* alike.

The largest group of verbs of derogatory or abusive connotation are those characterized by *-t'a-* (for singular verbs) and *-t'cə-* (for plural verbs), attached to certain verb roots. In most of the cases there is a corresponding polite form consisting of the same root with added *-tcwə-* instead of *-t'a-*, *-tcmə-* instead of *-t'cə-*. Verbal determinants, petrified suffixes or second position stems, are common in Chitimacha. Often there is no easily assignable meaning, as, for example, in the case of *-te-* in certain adjectival verbs, or *-nə-* in *cah-nə-* 'to sleep' and *peh-nə-* 'to have fits'. But about a half dozen determinants occurring in certain verbs of motion and position have clearly discernible meanings. I illustrate those for which I have recorded examples with the root *cah-*, plural *cahm-* 'to go in'. Note that both the root and the determinants may distinguish between singular and plural form.

<i>-t'əwə-</i>	'to move violently, to rush'	e.g. <i>caht'əwi'k'</i>	'to dash in, fall in'
<i>-tpk'uct-</i>	ditto (plural)	<i>cahtpk'uctk</i>	'to stampede into, several fall in'
<i>-tct-</i>	transitivizer	<i>cahtctk</i>	'to bring in'
<i>-wə-</i>	transitivizer	<i>cahwi'k'</i>	'to put in'
<i>-(k)tk'ect-</i>	'to dump, handle a soft mass'	<i>cahtk'ectk</i>	'to dump into'
<i>-kint-</i>	'to throw'		

⁵ Literally, 'going he is' or 'having gone he is'.

- <i>tcwə-</i>	'to be vertical, standing'	<i>cahtcwi·k'</i>	'to walk in'
- <i>tcmə-</i>	ditto (plural)		
- <i>t'ə-</i>	'to be horizontal, in lying or crawling position.'	<i>caht'i·k'</i>	'to crawl in'
- <i>t'cə-</i>	ditto (plural)	<i>cahmt'ci·k'</i>	'several crawl in'
- <i>y-</i>	'to be in an indifferent position'	<i>cahyk</i>	'to get in'

It will be seen that the last three determinants, *-tcwə-*, *-t'ə-*, *-y-*, are in the same relation to each other as are the three copula-auxiliaries *tcī(h)-*, *pe(h)-*, *hi(h)*. Continuing the parallel, *-t'ə-* and the corresponding plural *-t'cə-*, in addition to their primary positional meaning, have, like *pe(h)-*, the derogatory connotation. The infinitive of a *-t'ə-* verb may occur together with the auxiliary *pe(h)-*, as in the example.

'*apcant'i·k'* 'icpen 'He came in, the so-and-so!'

-t'cə- verbs, being plural, do not permit this sort of redundancy.

The primary value of *-t'ə-* and *-t'cə-* comes out clearly in certain verbs which are of such a nature that they are never interpretable as disrespectful. Thus:

<i>nat'i·k'</i>	pl. <i>namt'ci·k'</i>	'to crawl, to lie stretched out'
<i>ket'i·k'</i>	<i>kemt'ci·k'</i>	'to lie close, got close in horizontal position'
<i>nu·t'i·k'</i>		'to lie on one's back'
<i>hist'i·k'</i>		'to crawl under'
<i>'i·t'i·k'</i>		'to roll over'

Of the verb roots involved, *na-*, *nu-* and *his-* are not known to occur with the determinant *-tcwə-*. The roots *ke-* and *'iy-* (> *'i-*) make the verbs *ketcwi·k'* 'to stand up close beside' and *kas-'i·tcwi·k'* 'to turn about (i.e., while standing)'.

With *ci-*, pl. *cim-* are formed *cit'i·k'*, pl. *cimt'ci·k'* 'to go' used only in the disrespectful sense. In the remaining cases, the meaning is positional or disrespectful according to the same principle as explained for the copula *pe(h)-*. This holds for the verbs:

		polite sg. ⁶
<i>huht'i·k'</i> , pl. <i>huhamt'ci·k'</i>	'to enter a house'	<i>huhtcwi·k'</i>
<i>caht'i·k'</i> , pl. <i>cahamt'ci·k'</i>	'to go into'	<i>cahtcwi·k'</i>
<i>cant'i·k'</i> , pl. <i>camt'ci·k'</i>	'to get out'	
<i>peht'i·k'</i> , pl. <i>pehamt'ci·k'</i>	'to get upon'	<i>pehtcwi·k'</i> or <i>pehyk</i>
<i>kuyt'i·k'</i> , pl. <i>ku(y)mt'ci·k'</i>	'to get into a vehicle'	<i>kuytcwi·k'</i>

⁶ I do not give the plurals because I have not recorded them in most cases.

nent'i-k', pl. *nemt'ci-k'* 'to get out of a vehicle, out of the water' *nencwi-k'*

Especially interesting is the case of the root *ni-*, which has two meanings: 'to get into the water', and 'to come to the water's edge.' The derivatives *nit'i-k'* and pl. *nimt'ci-k'* mean 'to get into the water horizontally (as in swimming)' or, with the other meaning of the root, 'to come to the water's edge' of an animal, or in the disrespectful sense. The point seems to be that it is normal to get into the water horizontally and for that reason no disrespectful connotation has attached to the verb in that meaning; but coming to the water's edge is normally done by human beings in the erect position and is therefore subject to the secondary connotation of the verbal determinant. *-t'a-* also occurs with the root *nuh-* 'to stand' (cf. *nuhtci-k'* 'to stand', *nuhtck* 'to run'); the meaning of the verb is figurative or disrespectful, e.g.

kapnuht'i 'he (an old, or half frozen horse, or disrespectfully of a person) got up'.

I have not exhausted the possibility for disrespectful speech in Chitimacha. There seem to be a number of phrases of a metaphorical nature in use. For instance, one says to a glutton,

nencu'u kapcahtk'ect'aci'i 'You're dumping it in too much,' or in freer English, 'You're just shovelling it in'. The verb is marked by the determinant *-tk'ect-* 'to handle a soft mass (like soft mush or slop)'. I do not attempt to survey the possibilities in this direction (though, doubtless, it would be interesting to do so), but limit myself to the more or less formalized type of verb that I have described.

The system, as described, includes many of the common verbs of motion and a copula-auxiliary (a much used word type in Chitimacha). The possibility of this mode of expression is therefore quite extensive.

Of the verbs of derogatory or abusive connotation, *ketic-* and *ketup-* 's'en aller', do not lend themselves to any special explanation. We know them only in the disrespectful use and have no contrasting non-abusive forms to compare them with. All the remaining cases illustrate a single underlying principle of transfer:

- a) A verb has a primary meaning involving the idea of horizontal or lying position and is applicable in this sense to animals and inanimate objects.
- b) Applied to persons, the verb has little, perhaps no, implication of position, but instead, has a derogatory, disrespectful or abusive connotation, which may in turn be jokingly applied.

The disrespectful connotation seems to be connected with the matter of treating the human subject as though he were brute or inanimate.

This reminds one of the reported playful custom in certain English circles of referring to one's friend as though he were animal or vegetable, for example, as 'old horse', 'old bean', or 'old potato'. 'Old crab' is parallel in the main, but is different in that it has some special figurative connotation supposed to be a transfer of the special traits of a particular creature to the human subject. 'Old horse' and 'old potato' are nouns and, I believe, necessarily mild, where the Chitimacha cases are verbs and not necessarily mild. Closer parallels are to be found, for example, in German:

<i>fressen</i>	beside <i>essen</i>	'to eat'
<i>saufen</i>	<i>trinken</i>	'to drink'
<i>ersaufen</i>	<i>ertrinken</i>	'to drown'
<i>krepieren</i>	<i>sterben</i>	'to die'
<i>trächtig sein</i>	<i>schwanger sein</i>	'to be pregnant'

These words are verbs of bodily functions and are applicable first of all to animals. *Fressen* and *saufen* may be applied to human beings in impolite or unpolite speech to connote excessive or unmannerly eating or drinking and all five verbs may be used with no other connotation than one of insult or strong disfavor; finally, like the Chitimacha, they may be used in a humorous sense, or as coarse substitutes for the more polite forms. The German type of disrespectful verb is also found, to my knowledge,⁷ in Yiddish:

<i>fresn</i>	beside <i>esn</i>	'to eat'
<i>zoifn</i>	<i>trinkən</i>	'to drink'
<i>pejgərn</i>	<i>štarbn</i>	'to die'

in Polish:

<i>zrzyć</i>	beside <i>jeść</i>	'to eat'
<i>zdechnąć</i>	<i>umrzeć</i>	'to die'

In Czech:

<i>žráti</i>	beside <i>jísti</i>	'to eat'
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In French:

<i>crever</i>	beside <i>mourir</i>	'to die'
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⁷ I am responsible for this knowledge to Dr. Max Weinreich for the Yiddish, to Miss Pauline Borkowski for the Polish, to Dr. Stanley Newman for the Czech, to Dr. George Herzog for the Hungarian. The German, I might add here, was kindly verified by Prof. Eduard Prokosch.

In Hungarian:

<i>zabál</i>	beside <i>esz-ik</i>	'he eats'
<i>meg-dögöl</i>	<i>meg-hal</i>	'he dies'
<i>vizel</i>	<i>urinál</i>	'he urinates'
<i>párosod-ik</i>	various euphemistic circumlocu- tions	'he copulates'
<i>közösül</i>		

In all of these the general principle is the same: the animal verb may be applied disrespectfully to humans. Hungarian *zabál* (probably < *zab* 'rye') is not the general word for the eating of any animal, but is usually limited in primary application to the eating of a horse. The Yiddish and the Hungarian animal words for 'to die' are parallel denominative verbs formed, the one from Hebrew *peger* 'corpse', the other from Hungarian *dög* 'carcass'.

Hungarian *párosodik* (< Ger. *Paar*) and *közösül* (< *köz* 'space in between') 'to copulate' present a noteworthy variation of the general principle. These words were originally coined as scientific terms and are still in common use for scientific purposes. The scientist would even use these words of persons, but general urban usage accepts them as polite only with reference to animals; of persons they are derogatory (not vulgar) and bear the implication that the person is being treated as a mere mechanical, physiological entity.

Surprisingly enough, I find no true parallels of this type in English.⁸ I say surprisingly, for English is certainly rich in its development of transferred usages and the standard language, as well as slang, contains an extensive derogatory terminology. Yet, in comparable transferred usages, English animal verbs seem to retain in each case some specific color of the animal action, thus, e.g.: 'to bellow', 'to howl', 'to bark', 'to lap up', 'to paw over', 'to fawn'. Such words applied to a person represent his action as resembling a specific action of some definite animal, but are never simply disrespectful as the Chitimacha always is and as the German sometimes is.

Polish has a peculiar development of disrespectful nouns following the same principle as that in the verb. There are distinct nouns for certain of the body parts of men and animals and the animal words may be applied to persons in derogatory speech. For example, a mother might say to her child in a discouraged mood, *Poco ty zawsze masz take brudne mordę* (rather than *twarz*) *i łapy* (rather than *ręce*)? 'Why do you always have such dirty muzzle and paws?' Other substitutions are:

⁸ Dr. Murray Emmeneau tells me of a dialectic (Lunenburg, Nova Scotia) use of 'fress' (borrowed from German) and 'swill' as animal or derogatory words for 'eat' and 'drink'.

<i>pysk</i>	'snout'	for <i>twarz</i>	'face'
<i>leb</i>	'(animal's) head'	<i>głowa</i>	'(person's) head'
<i>goleń</i>	'(animal's) leg'	<i>noga</i>	'(person's) leg'
<i>kopyto</i>	'hoof'	<i>stopa</i>	'sole'
<i>ślip</i>	'(animal's) eye'	<i>oko</i>	'(person's) eye'

This type of usage is partly established in English. English also employs 'carcass' as a derogatory substitute for 'body'.

Transfer of expressions applicable to inanimate objects, rather than animals, to give disrespectful locutions occur in older English, 'betake thyself off!' Polish *wynoś się* 'carry yourself away!' and English 'shut your face!' 'shut your trap!' Polish *zamknij mordę* 'shut (your) muzzle!'

The instances cited from European languages are like the Chitimacha in that in each case a special disrespectful vocabulary exists besides a contrasting polite vocabulary. To the two sets of words are attached a connotation of impoliteness on the one hand and one of politeness on the other, with no, or only secondary, reference to the content of the words involved. In some of the European instances the derogatory word is in part metaphorical, e.g., German *fressen* 'to eat ravenously and in unmannerly fashion as certain animals do', as well as simply derogatory or abusive 'to eat'. In fact, in this particular instance, the derogatory, abusive connotation may be thought of as, in part, a transfer of the metaphorical value, as well as a direct transfer of the animal application. In Chitimacha there seems to be little or no metaphorical use of the special vocabulary; the transfer seems to be only derogatory or abusive without the possibility of a direct figurative value. On the other hand, the formatives *-t'a-*, *-t'ca-* that make derogatory words generally, also occur in a few words where they have only their primary meaning and never the derogatory secondary meaning, e.g., *nat'i·k* 'to crawl', *nit'i·k* 'to go in swimming'.

The common principle of transfer involved in the European examples quoted consists of the transfer of animal verbs of bodily functions to persons. A few instances of transfer of expressions primarily referring to inanimate things were given. The Chitimacha principle (except for *ketic-* and *ketup-* which we cannot safely attempt to explain) consists of applying to human subjects words implying horizontal position which have come to be regarded as not properly applicable to human beings; it amounts then to a transfer of animal-inanimate forms to humans.

The Chitimacha is distinctive mainly in the regularity and extent to which it has built up a derogatory, abusive vocabulary on the basis of a single consistent principle of transfer.

MISCELLANEA

THE PORTUGUESE FINAL *-ão*

The modern Portuguese final *-ão* (*-am*¹) replaces the following Latin finals: *-ant*, *-ūnt* (3d pl. perf. ind.), *-anum*, *-anem*, *-onem*, *-ūdinem*, and *-on* (in the adverb *non*). In early Portuguese these finals are found to be respectively *-am*², *-om*, *-ão*, *-am*, *-om*, *-õe*, and *om* (in *nom*).

Final *e* after *n* presumably dropped very early in Spain and Portugal; thus *-anem* and *-onem* became *-an* and *-on*, cf. Spanish *pan* and *oración*. In place of *-ūdinem* we have to suppose **-ūdinem*, which with the fall of intervocalic *d* became regularly **-óene*, i.e., *-oēe*, then *-õe*. Since the plurals of *-õe* and of *-om* from *-onem* were both *-ões*, *-õe* became *-om* by analogy in the course of the fifteenth century.³

There is no more perplexing problem in the history of Portuguese grammar than that of the fusion of all these forms into the modern *-ão*. Was the process one of regular phonological development or was the fusion brought about largely through the force of analogy? Two serious efforts to solve the problem have been made. Leite de Vasconcellos⁴ inclines to a phonological explanation. He supposes that because of an inexplicable dislike for *-ã* and *-õ*, an *o* was affixed to them making them *-ão* and *õo* respectively and that *-õo* later became *-ão* by dissimilation. He then asks why *bõo* from *bonum* did not become *bão* instead of *bom* and answers that *bõo* still had two *o*'s at the time that *-õ* became *-ão*. But according to his theory *-õ* had to appropriate another *o* in order to become *-ão*. Leite thus completely disproves his own argument.

¹ According to the rules of the nova ortografia the spelling *-am* in verbs is used only in the unstressed position; thus *amaram* corresponds to Spanish *amaran* while *amarão* corresponds to Spanish *amarán*; *-ão* is accordingly used in monosyllables, e.g., *dão*. The sound has been described by Cornu in the Grundriss as somewhat like French syllables *an ou* pronounced in rapid succession without liaison.

² In all of these finals except *-ão* and *õe* the nasalization may be variously represented by *m*, *n* or the til.

³ Cf. Leite de Vasconcellos, *Lições de Filologia Portuguesa*² 145 n.2 (Lisbon, 1926).

⁴ Op. cit. 141-6, particularly 145 n. 2.

Nobiling^{4a} finds in Brazilian Portuguese, which he believes to represent an earlier stage of development than the language of Lisbon, a tendency of, for instance, *lã* to become *lãu* and *bõ* to become *bõu*. He assumes that the finals *-ã* and *-õ* followed this tendency to a complete dissimilation to *-ão* while such words as *lã* and *bom*, even after they had become monosyllabic, were prevented from further change by the 'quantity' of their vowels, that is, by the fact that the vowels were contractions. What this difference was between an ordinary stressed *õ* and a stressed *õ* from *õo*, he fails to explain. The existence in modern Portuguese of words like *bom* < *bonum*, *dom* < *donum*, *lã* < *lanam*, *irmã* < *germana*, *vã* < *vanam* along with their plurals renders untenable a phonological explanation based on dissimilation.

In the present paper an analogical explanation will be offered. It is based on a study of forms found in trustworthy documents of the fourteenth, fifteenth, and sixteenth centuries. The transformation took place between the second half of the fourteenth century and the first half of the sixteenth, i.e., in about 150 years. In a document⁵ which John Miller Burnam assigns to the second half of the fourteenth century (about 1385) we find the forms in all their early variety, while in the *Cancioneiro Geral* of Garcia de Resende, dated 1516, it has been shown by Leite⁶ through the evidence of rhymes that the modern pronunciation of these forms had already been attained.⁷ In the interval between these two works there is great confusion. Out of this confusion we shall endeavor to discover the causes which led to the ultimate merging.

The causes are found to be threefold; we shall examine each in turn.

I. The Rôle of *vão*. As stated above, in the *Regla de Sam Beento* we find all these nasal finals in what must have been their primitive Portuguese form. But, while we find *ham*⁸ < **hant* (for *habent*) and *som*⁹ <

^{4a} O. Nobiling, *Die Nasalvokale im Portugiesischen*, *Die Neueren Sprachen* 11.150-1.

⁵ An Old Portuguese Version of the *Rôle of Benedict* [*Regla de Sam Beento*], *University of Cincinnati Studies*, Ser. 2, vol. 7, no. 5 (1911).

⁶ Op. cit. 142. I have compared the Kausler edition, which Leite used, with the Huntington facsimile edition and found the rhymes correct. Many more examples might be cited.

⁷ Because of the conservatism of orthography and the complete lack of Portuguese grammars before that of Fernão de Oliveira (1536), rhymes are the only means of determining pronunciation. In the earlier *cancioneiros* (CA, CV, CB) no rhymes between *-am* and *-om*, between *-ão* and *-am*, nor between *-ão* and *-om* are found.

⁸ E.g., page 25 line 2 and page 66 line 27.

⁹ E.g., page 34 line 16 and page 59 line 8.

sunt, the form of the 3d pl. of the verb *ir* is *vaano*.¹⁰ It has been generally assumed that *-ünt* (and *-iünt*) of the 3d pl. pres. ind. of verbs of the third and fourth conjugations was replaced by *-ent* in Spain and Portugal.¹¹ But the situation in Old Portuguese as revealed in the examples quoted above forces us to the conclusion that *vão* comes from *vádünt* by a regular phonological development: *vádünt* > *vaon* > *vaõ*, i.e., *vão* with extension of the nasalization to both vowels.¹² Because of the analogical force of a common and important form like *vão*, other stressed forms like *estam*, *dam*, *ham*, and the 3d pl. fut. ind. ending *-am* (which is nothing more than *ham* used as suffix) became *estão*, *dão*, *hão*, and *-ão*, although they retained the old spelling quite generally until the beginning of the present century.¹³ It is quite probable that in the Regla de Sam Beento their pronunciation had already changed.

This latter conclusion is based on the following considerations. The 3d pl. pres. subj. of *ir* should regularly be *vaam* < *vadant*; and one example of *vaam* is found.¹⁴ Now *vaam* belongs phonetically to the same group as *estam*, etc. and should therefore change to *vão*. This it does, not only in pronunciation but also in spelling, there being two examples of *vaano*¹⁵ as subjunctive. Thus while *estam* had probably become *estão* in pronunciation, *vaam* had changed in both pronunciation and spelling, the change in spelling being facilitated by the fact that the new spelling had already existed in the indicative.

As *estam* became *estão*, *som* became *são* (written *sam*) by an analogy which was greatly strengthened by the gradual usurpation by *estar* of some of the functions of *ser*. Other particles in *-om* soon changed to *-ão*

¹⁰ There are two examples: page 59 lines 8 and 11. In the *Canzoniere Portoghese della Biblioteca Vaticana* (Halle, 1875; a diplomatic edition), are found many examples of *vão*, e.g., poem 1055: *uaõ* in line 10 rhyming with *foã* from *fulano* in line 8.

¹¹ Cf. C. H. Grandgent, *Intr. to Vulgar Latin*, Boston, 1908, §449.

¹² The nasal resonance spreads to both vowels no matter what the original position of the *n* was; thus *vaon* becomes *vão* just as *mano* becomes *mão*. Cf. *nidum* > *nïo* > *ninho*, where the nasal resonance moves forward from the initial *n* to become an intervocalic palatalized nasal. For other examples, see LANG. 7. 143; MLN 43. 469, 470; Rom. Rev. 21. 143.

¹³ Even in early documents *-am* is found where, because of its etymology, there can be no doubt as to its pronunciation as *-ão*, e.g., *foã* in note 10 above and *foam* in line 1 of the same poem.

¹⁴ Page 53 line 1.

¹⁵ Page 56 line 29 and page 61 line 10.

particularly *entom*, which was reinforced in this tendency by confusion with *entam*¹⁶, the apocopated form of *entanto*.

II. The Rôle of *mão*, *irmão*, etc. The change of stressed *-am* and *-om* to *-ão* in verbs had established an analogical trend which was soon to spread to nouns in stressed *-am* and *-om*. This further development received great impetus from the small but important group of nouns in which *-ão* had developed according to regular phonological principles. As common as *ir* among verbs are *mão*, *irmão*, and *cristão* among nouns.¹⁷ And thus *cam*, *pam*, *visom*, and *treiçom* became *cão*, *pão*, *visão*, and *treição*. In the Graall¹⁸ (early fifteenth century) most of these nouns are found to end in *-am*. This undoubtedly represents a change in pronunciation to *-ão*.¹⁹

III. Unstressed *-am* from *-ant* appeared regularly in the present indicative of verbs of the first conjugation, the present subjunctive of verbs of the second and third conjugations, the imperfect indicative, the conditional, and the simple pluperfect indicative, while stressed *-om* from *-unt* appeared regularly in the preterit. In the fourteenth century *-om* begins to appear in the imperfect, conditional, and pluperfect, while *-am* begins to appear in the preterit.²⁰ As *-om* never appears in the present indicative or subjunctive, we are led to believe that this exchange of endings is not merely orthographic but represents rather a confusion in

¹⁶ The variants of *tam* were *entam* and *atam*. Cf. A Historia dos Cavalleiros da Mesa Redonda e da Demanda do Santo Graall 131 (edited by Karl von Reinhardtstoettner, Berlin, 1887): foram emtam coitados que cayrom. Throughout this document we find *entom* and *entam*, with predominance of the latter. We also find *nom* and *nam*, *senom* and *senam*, *nom* being more frequent than *nam* and *senam* more frequent than *senom*, probably because *nom* commonly occurred in the unstressed position while *senam* is always stressed.

¹⁷ We are led to believe that the original analogical impulse did not come from this group of nouns by the fact that in the plural, where there were no verb endings contributing, there was no fusion; hence the three phonological plurals: *mãos*, *cães*, *visões*.

¹⁸ See n. 16 above.

¹⁹ *Fão* from *fulano* is also written *fooam* page 5 line 25 and *fãoam* page 5 line 25, while the 3d pl. pres. ind. of *ir* occurs as follows: *uaaom* page 26 line 2 and page 103 line 1, *vaaom* page 103 line 5, and *vãao* page 110 line 24. *Som* as 3d pl. occurs only a few times, while *sam* is quite common. As a 1st sing. *som* is always used, probably because the force of analogy was less felt in the first person.

²⁰ Cf. A Vida de Sancto Amaro (Texte Portugais du XIV^e Siècle) in Romania 30. 504-518: imperfect *beijauölhe* page 511 line 35, *pousavõ* page 514 line 1, *cantauiõ* page 517 line 20; preterit *oseruiram* = *o seruiram* page 514 line 27.

pronunciation. And it is in the Graall that we find the key to this confusion. Although in this document there are no imperfects or conditionals in *-om*, there are many preterits in *-am*; and while the majority of preterits end in *-om*, that of *ser* (and *ir*) usually ends in *-am*.

There are many subordinate clauses in which there is little difference in the time reference of the preterit and that of the pluperfect, as exemplified in the following sentence from A Vida de Sancto Amaro²¹: *leyxey aqui hũa nááo cõ meos cõpanheiros que sayrom cõmigo deminha terra*, where the verb may be rendered either 'set forth' or 'had set forth' without any important difference in the meaning.²² This is particularly true in the passive voice where the preterit will present as a state or condition what the pluperfect presents as an action. 'He was wounded' means the same thing as 'He had been wounded', so far as his condition at that time is concerned.

It is therefore quite likely that the original confusion arose between the preterit and the pluperfect of *ser* (and *ir*), then spread to all verbs and to the imperfect and conditional, with the form in *-am* finally prevailing in all three tenses.

Completion of the Fusion. While *-om* of the preterit was being replaced by *-am*, unstressed *-am* itself was changing to *-ão* by analogy with stressed *-am*. This took place first in the present indicative of verbs of the first conjugation and the present subjunctive of verbs of the second and third conjugations; that is, *amam* became *amão* by analogy with *dão*, etc., while *comam* became *comão* by analogy with the subjunctive *vão*. Finally, the process was completed when *-am* in the imperfect, conditional, preterit, and pluperfect, became *-ão* by analogy with the present.

EDWIN B. WILLIAMS

LITHUANIAN *dỹkas* AND ITS GROUP

Lane in Language 8.297 connects Welsh *dig* 'angry' (as neuter 'anger') and its group (which so far has been without connection outside of British) with Russian *dikij* 'wild', *dič* 'game; wilderness', Polish *dziki* 'wild', Lithuanian *dỹkas* 'arrogant, stubborn', Lettish *dĩks* 'idle', etc.

²¹ Page 518 line 1; cf. n. 20 above.

²² There has always been great confusion between the preterit and the simple pluperfect in Portuguese. Cf. Reinhardstoettner, *Grammatik der portugiesischen Sprache* §258 δ (Strassburg, 1878), and Epiphania da Silva Dias, *Syntaxe Historica Portuguesa* §256 a, Obs. 2 (Lisbon, 1918).

He says that the meaning 'idle' of the Lettish word 'is certainly secondary'.

Some remarks on this etymology seem to be in order. First of all, the hypothecated Balto-Slavic form, if it existed at all, must have been *dik-*, and not *dik-* (cf. Trautmann, *Baltisch-Slavisches Wörterbuch* 54).

Furthermore, it is difficult to derive the meaning of the Baltic and the Slavic words on the one hand and of the British on the other from one and the same source. The original meaning of the Slavic word, at least as far back as we can trace it, was 'wild' only in the sense of 'undomesticated (of animals); growing wild, non-cultivated (of plants)'. That this must have been the original meaning can easily be deduced from the numerous examples given by Dal'i, *Tolkovyj slovar' živogo velikoruskago jazyka*, 4th edition, Vol. I, 1881 seq. This deduction is corroborated by the fact that in Miklosich, *Lexicon Palaeoslovenico-Graeco-Latinum* 161 *dikŭ* appears only in this sense. The example *dikaja bylŭ* which is quoted from a Bulgarian fragment of the 15th century means 'wild-growing plant'. If 'anger' or 'angry' is supposed to be the original meaning of Welsh *dig* it is obvious that etymological connection with the Slavic word is out of the question. The other meanings that appear with this word in modern Russian (namely: 'savage, ferocious, odd, strange, unsociable, shy') are but later additions, and some of them undoubtedly came from Western Europe, especially from French as a translation of *sauvage*.

As for the Baltic words, the statement that the sense 'idle' of Lettish *diks* 'is certainly secondary' is incorrect due to a misinterpretation of Lithuanian *dŷkas*. Lane gives 'arrogant, stubborn' as the meaning of this Lithuanian word. None of my available sources gives this meaning. Lalis, *A Dictionary of the Lithuanian and English Languages* (Chicago 1910) translates: 'empty; idle; vain; useless', and for the adverb *dykaĩ* he gives the meaning 'free of charge'. The same meaning is given in the other vocabularies and dictionaries:

K. Buga and I. A. Baudouin de Courtenay, *Litovsko-russkij slovarčik* 5 (St. Petersburg 1912) translate it by the Russian word *pustoj* 'empty, hollow, desert (place); idle, vain'.

J. Šlapelis, *Lietuvių ir rusų kalbų žodynas* 1.103 (Vilnius 1921) gives the same meaning and adds to it *prazdynj, ničego ne delajuščij* 'idle, sauntering'.

A. Busch and T. Chomskas, *Litauisch-Deutsches Wörterbuch für den Hand- und Schulgebrauch* 50 (Berlin 1927) have: *dykaĩ* adv. 'unentgeltlich, leer', *dŷkas* adj. 'hohl, leer, ledig, öde, müssig, wüst'.

The most complete Lithuanian dictionary, namely the *Wörterbuch der litauischen Schriftsprache* (Heidelberg 1932) edited by Niedermann, myself, and Brender gives (1.123) the meanings '1. müssig, untätig. 2. leer, öde' for the adjective *dỹkas*, and the meanings '1. müssig, ohne zu arbeiten. 2. umsonst, ohne Lohn, ohne Entgelt, unentgeltlich, kostenlos, gratis. 3. umsonst, vergebens, ohne Wirkung, ohne Erfolg' for the adverb *dykaĩ*. This same dictionary contains a great number of other words that are derived from the adjective *dỹkas*: *dykaduõnis*, *dykanõris*, *dykáuti*, *dykavidũris*, *dyké'ti*, *dykỹbé*, *dykỹné*, *dykiné'ti*, *dykĩnis*, *dykinỹs*, *dykiniũoti*, *dỹkinti*, *dykomis*, *dỹkti*, *dykumà*, *dykũmas*, *dykũnas*. Of all these words only the verb *dỹkti* deserves further consideration, because it alone shows a somewhat differing meaning, namely: '1. müssig gehen, faulenz. 2. leer stehen, brach liegen, veröden. 3. mutwillig, übermütig, ausgelassen sein, Unfug treiben'. It is this third meaning that might lead to 'arrogant, stubborn', the meaning registered by Lane. But this meaning is a very late development derived from the meaning 'idle' as an outcome of the belief (prevalent among the peasants) that idleness is the source of all vice. Especially the compound *iš-dỹkti* is used in this sense and its past participle *iš-dỹkęs* is explained as '1. ausgelassen, mutwillig, ungezogen. 2. liederlich' in the above-mentioned dictionary (1. 300). In spite of Trautmann, *Baltisch-Slavisches Wörterbuch* 54, where the meaning 'mutwillig, übermütig; leidenschaftlich' is attributed to the adjective *dỹkas*, this meaning is connected only with the participle *išdỹkęs*. About the verb *dỹkti* cf. also Jaunius, *Gramatika litovskago jazyka* (Petrograd 1916) 185 of the Russian translation. There and also in Bezzenberger, *Litauische Forschungen* (Göttingen 1882) 107 occurs a compound *už-dỹkti* in the sense of 'ausser Atem kommen, to get out of breath'. This sense derived from the fundamental meaning 'empty'.

Obviously the Baltic meaning 'empty' and 'idle' has even less in common with the meaning of Welsh *dig* than the Slavic 'undomesticated' and 'non-cultivated'.

ALFRED SENN

NOTE ON THE CHINOOK JARGON

In LANGUAGE 8. 27-50, Dr. Melville Jacobs gives a description of the Chinook Jargon as spoken by a Clackamas, Mrs. Victoria Howard of Oregon City. It is not clear whether other similar material was obtained from other individuals.

The language is certainly not the Chinook Jargon that has been used

for years all along the coast, but seems to be a jargon affected by the Clackamas, a dialect of Chinook proper. For example the sentence *la's-muŋk!a'uk!au* would be in the jargon as I heard it and use it *tla'ska ma'muk k!au*. Neither the short form *las*, nor the contraction *muŋk* for *mamuk*, nor the reduplication of *k!au* is used by other speakers.

I learned Chinook in 1885 from a number of Bella Coola and have used it with speakers of Tillamook, Clatsop, Chinook proper, Lower Chehalis, Songish, Kwakiutl, Bella Bella, Tsimshian, Haida, but I have never heard the forms used by Mrs. Howard.

It seems to me particularly important to note that an old Clatsop woman who was married to an Iroquois, an old Hudson Bay employee, at Clatsop used the same Chinook that has often been recorded. Neither did Charles Cultee, my informant from whom I recorded my Chinook and Kathlamet texts, use the forms recorded by Dr. Jacobs, but rather the usual form of the jargon. Both of these had spoken Chinook proper as their native language, although they were not using it at the time of my recording. The same condition prevailed in the Grande Ronde Reservation when I talked to a Clackamas blacksmith about 1890.

I think the best proof of the correctness of the older presentation of the jargon is given by a number of little songs which I noted down in 1887 and which were published in the *Journal of American Folklore* 1. 220 ff. The tunes given there show clearly that the full forms were used, for instance *tlatowa* (♪ ♪ ♪), even *nani'tc* (♪ ♪). The songs also indicate that the various tribes were liable to introduce words of their own languages in their speech. Thus we have Haida *gud* (l.c. 24), Tlingit *xat kawawell* (*xwàwál?*) 'I broke down' (l.c. no.36). This shows, that a slight tendency to intermingling with native languages occurred, which may have been unusually marked in the case of Dr. Jacob's Clackamas informants. The specimens recorded by him are certainly not typical Chinook jargon.

I give here a few examples of Chinook songs recorded by me in 1887 in Victoria. All these were used by British Columbia tribes.

1.c. no.37

Kaltas kopa naika
Spo·s maika ma·c naika
Hai'u *puti boys* kuli kopa town

A'tlki wext naika i'skum.

We·k q'al kopa naika.

I don't care
If you desert me.
Many pretty boys walk in
town
Soon (one will) take me
again.
It is not hard on me.

no. 6

Tlo·'nas qada naika tu'mtum

I don't know how my heart
feels

Kwa·'nsum naika ti'ki na·'nite maika

Always I wish to see you

A'tlki naika wa·'wa tlaxau'yam.

Soon I say good-bye.

Ya a·'ya.

Ya a·'ya.

no. 25

Tlo·s maika tea·ko ahi·'ya ya

Oh, come! ahi·'ya ya

Po·'latli alta aya a·

It is dark now aya a·

Naika tiki wa·'wa. a·ya.

I want to speak (to you)
a·ya.

no. 22

Qa·x məsai'ka tla'towa a'lta

Where are ye going now?

Potlate le·'ma

Shake hands!

Tlaxau'ya, *George Bell!*

Good-bye, George Bell!

no. 11

Hai'as tlaxau'ya

Very unhappy (I was)

Ku'naməskst naika o·'ləman

With my wife

Ko·'pa Bıkto'li

In Victoria.

He'lo tla'ksta

Nobody

Wa·'wa tlaxau'ya nsai'ka

Said good-bye to us

Ko'pa Bıkto'li

In Victoria.

About 1890¹ my Chinook informants used a number of words extinct in the northern dialects and not contained in the older vocabularies of Horatio Hale and George Gibbs. I give them here.

pēk' 'bone of fish'

k!we·'n 'to give a present'

tsini'stsinis 'muskrat'

tcxup' 'fire is out'

pūl q!wate·'n 'robin' ('red belly')

me·'tllən 'to pursue'

b·ō'yo 'soup' (French)

tə'qsən 'to pursue'

te·l 'tail' (English)

t!ō'ən 'to put up, to put away'

koi'm 'grandchild' (Chehalis)

ale·'m 'to rest'

ubo·'t 'last' (French au bout?)

p!ə'nis 'to roast'

ā'ac 'to accompany'

ke·'pot 'to sew'

təō'lak 'to call'

k!a 'to stop' (Chinook)

tō'itc 'to carry on back'

o·'ə 'to vomit'

mō'sum na·'nitc 'to dream'

hau'anse· 'let us'

o·'ma 'to give food' (Chehalis)

xe·'ləmil 'to make'

¹ This list was published in *Science*, March 4, 1892.

ma'muk 'to make' had acquired an obscene meaning and was not used on Columbia River in polite discourse.

A few words were found with a meaning slightly different from those given in the vocabularies.

ma'muk ti'pcin 'to mend' instead of 'to sew'

tse'pe we'xat 'to lose the way' was not used; *tse'pe* means only 'to miss'

wax (Hale) 'to vomit' was not used

tlux 'to tear', means also 'to fall'

A Tillamook living on the Siletz Reservation used the term *kopa qwa''t* 'at that time', which I never heard anywhere else.

Some words which in the older dictionaries are considered as originating in the jargon are Chinook proper in origin: *ana'* exclamation of pain or displeasure; *he'he* 'to laugh'; *hvm* 'stinking'; *kwe'kwe* 'mallard duck'; *le'le* 'a long time'; *la'plap* 'to boil'; *na* interrogative particle; *na'* 'ho!look here!'; *po* 'a puff of breath'; *to'to* 'to shake'; *i'qix* 'brother-in-law'; *ke'lapai* 'to return'; *tukwilla* 'nuts'; *tal* 'tired' is Chinook, not derived from English; *spo-s* 'if', pronounced on Shoalwater Bay *po-s*, is probably not derived from English *suppose*, but a Chinook proper conjunction 'contrary to fact,' cf. Handbook of American Indian Languages RBAE 40:634. The word *kwadi's* whale, is Tillamook or Puget Sound Salish.

As an example I give here a tale obtained by me from a Tsimshian in 1888 and written down verbatim. Words that are English or Tsimshian are printed in Roman characters.

*a'ngate he'lo te'lxam kv'mtuks i'kta wihalai't.*²

Long ago no people knew what the great dance.

ikt man ya'ka ku'li kopa la'motai ya'ka tiki lap

One man he went to the mountain he wished to find

la'muto.

*tana's le'le ya'ka ku'li pe ya'ka lap ikta, mas'o'l.*³

mountain sheep.

A little long he went and he found something, a
white bear

ya'ka ma-c bow pe ka'ka lap mas'o'l.

la'ska ku'li

He threw (shot) bow (arrow) and he found (hit) the white bear. They
went

² *wihalai't* is the cannibal ceremony.

³ *mas'o'l* a fabulous being, a white bear.

pe man ya'ka ku'li ki'mta. wek sai'ya ya'ka ku'li.
and the man he went after. Not far he went.

mas'ol ya'ka ku'li si'tkvm wek sai'ya me'malost.
The white bear he went half not far (almost) dead.

o'kok mas'ol ya'ka tap la'motai dale't sa'xali. *o'kok*
That white bear he found the mountain really above (high). That

mas'ol ku'li inside. ya'ka hai'as lapot mi'lait. *o'kok*
white bear went in. It a large door was there. That

man mi'lait ta'xani pe ikt man ya'ka ku'li ta'xani.
man stayed outside and one man he went out.

ya'ka wa'wa kopa o'kok man, tca'ko. o'kok man tca'ko.
He said to that man 'Come!' That man came.

ya'ka na'nuc la'kit room. ikt room xalo'yim company.
He saw four rooms. One room another company.

ikt room ya'ka wext xalo'yim pe ikt room ya'ka wihaiat.
One room it more another and one room it the great Dance.

ya'ka tca'ko, ya'ka dance. ya'ka tiki kv'mtks o'kok man
He came, he danced. He wished to know that man

qa'da la'ska ma'mvk. wext ya'ka tca'ko yau'a. ya'ka kape't.
how they did. Again he came here. He finished.

wext la'ska wa'wa, mai'ka kv'mtks wihaiat ma'kamvk
Also they said, 'You know the great dancer eats

man. ya'ka dale't kwas. ya'ka dale't masa'tci. ya'ka mi'lait
men.' He (was) really afraid. He (was) really bad. He stayed

room. (la'ska wa'wa,⁴) he'lo mai'ka kwat's' mai'ka ma'ka-
(in the) room. They said '(Do) not you be afraid. You eat

⁴ This sentence has been added.

mvk ikt man·təna's a·'lki wext ya'ka tca·'ko. he'lo
a man.' A little later again he came. Not at all

mé'malost.
he was dead.

ya'ka to'n ko·l ya'ka ke·'lapai ko'pa ya'ka e·'lehi. ya'ka
He (after) three years he returned to his country. He

dəle·'t lap səxali stick. *ya'ka mī'lait yau'a. ya'ka* sing
exactly found above (top of) tree. He stayed here. He sang

ka'nawe o·'kək wihalai't ma'mvk kv'mvks ya'ka. ka'nawe
everything that great dancer made know him. All

té'lɛəm ya'ka na·'nɛc. təna's le·'le ya'ka tca·'ko ke'kvle.
the people him saw. A little long he came down.

ya'ka lap e·'lehi. ya'ka lap ikt man. ya'ka ma'kamvk.
kape't
He found (reached) the ground. He found (met) a man, he ate (him).
Finished

ma'kamvk, wext i'skvm ikt. hai'yu la'ska i'skvm. ka'nawe
he ate, more he took one. Many them he took. All

té'lɛəm kwas ya'ka. la'ska ku·'li i'psut ko'pa kani·'m.
the people feared him. They went hiding in canoes.

té'lɛəm la'ska i'skvm ya'ka, pɔ'latc la'mətsɪn. la'ska
The people they took him, gave medicine. They

tiki ma'mvk kape't. hai'as le·'le la's ka ma'mvk la'mə tsɪn.
wished to make (it) finished. Very long they made medicine.

ya'ka tca·'ko təna's to·c. ya'ka tca·'ko to·c. la'ska ma'mvk
He came (to be) a little well. He came (to be) well. They made

kv'mvks té'lɛəm ka'kwa ya'ka ma'mvk.
know the people how he did.

FRANZ BOAS

BOOK REVIEWS

Die Iguvinischen Tafeln: Text, Übersetzung, Untersuchungen. Pp. viii + 91. By ALBRECHT VON BLUMENTHAL. Stuttgart: Kohlhammer, 1931.

A great deal has been written in recent years on the details of the Umbrian Tables of Iguvium, but there has been no work of general importance since Buck's Grammar of Oscan and Umbrian appeared in 1904 (but the revised edition of 1928 might be mentioned), until von Blumenthal's volume came out in 1931, with a great number of new interpretations, as well as a text accompanied by a Latin translation. The main innovations proposed by von Blumenthal I shall now list and discuss; space forbids more than the merest hint as to his line of argument in each instance.

Table III begins: *esunu fuia herter sume ustite sestentiaru urnasiaru*¹ 'The sacrifice of the regular bi-monthly (assembly) shall take place . . .'. *Sume ustite* is obviously a date; Bl. (33-4) explains as **s_omai ententi* with thematic inflection, 'aestate instante'. This gives a date in the late spring, agreeing with the accepted view that this festival corresponded somewhat to the Latin Ambarvalia. But the vowels do not work out properly (his *uhtur* < **āctōr* IF 48.247 is not to be accepted); one should rather posit **s_omai op-stahitai*, since *īnstāre* and *obstāre* are in this sense interchangeable. The perf. ptc. would then be used in a present meaning; the transfer of *stāre* to Conj. IV is warranted by Umb. *stahitu*, Osc. *stātt*, *stahint*, etc., and the syncope is seen in Osc. *eestīnt* 'exstant' < **ex-stahint*. With this alteration, Bl.'s interpretation becomes possible. *Huntak* III 3 'on this day' (34), to *-hunt -hont* used in demonstratives of identity, cf. Latin *hic* for the root. *Vukum-en* III 20 'in lucum', since the procedure is to be carried out in the open air (34-5); this meaning fits all passages.

The organization of the Atiedian Brothers, according to von Blumenthal (35-40, 83-4), consisted of 20 members, each representing one of

¹ It seems needless in this review to distinguish words engraved in the local Umbrian alphabet, by the use of bold-faced type. The references will indicate this adequately, since Tables I-IV, V a, V b 1-7 are in the local alphabet, and the remainder in the Latin alphabet.

the 20 gentes of Iguvium (listed II b 2-7), which were grouped in ten demes or decuriae (*tekuries* II b 1, *decurier* V b 11 and 16), eight of which included two gentes, one included three, and one included but one. The brotherhood was divided into two nations, the Lucian (*Vuċia* II b 26) and the Petronian (*Petrunia* II a 21, 35), and each of these nations was divided into two pentads (*puntes* III 4, 9, 10). *Fameñas* II b 2 denotes the slaves of the household. *Pumpeñas XII* (II b 2) denotes the fifth day after the Ides of the twelfth month (so p. 85, Latin *Quinquatrus* giving the hint; rather than the Nones, pp. 38-9); that it is a date is shown by Osc. *pumperias* on *iovila*-inscriptions of Capua.

Eikvasese V a 4 'ex sententia'; divide *eikva-sese* (41-2); this fits also V a 16. *Vepurus* V a 11 'impuris'; whence *felsva* is a fine or penalty, corresponding to *muta* V b 3, 4, 6 (42-3). *Nuřpener* V a 13 'assibus librariis', from **nūdo-pend-* (42-3); but it is hardly likely that **nog^wedhos* > **nobefos* would eventuate in **nūdo-* or **nōdo-* in time for the change to -ř- to take place. If any etymology is to be proposed, it is rather **novo-du-pend-iyo-* 'new dupondius', indicating a change in the coinage system.

Sevakni- 'sollemnis', *perakni-* 'perennis, one year old' (45-7), with elements *sevo-* 'all', *per* 'through', *akno-* 'year'. *Akrutu* V a 9 is a verb, from **akruyō* 'fett machen'; cf. its correspondence to *upetu* V a 7, in a string of verbs otherwise identical (*upetu/akrutu, revestu, emantur herte*) (47); but this seems to me rather more difficult than retaining the old interpretation 'ex agro'. *Kastruwuf* V a 13 refers to the sacrificial victims (43, 47).

Kutef I a 6, like *tases* in later Tables, is transitive, 'imposing silence' (49); the meaning is excellent for the passages, but it is hard to explain *tases* on this basis. *Punes* IV 33 is partitive genitive as object (50); Bl. accepts Thurneysen's interpretation of *poni-* as **pol-ni-* 'meal', that is, meal mixed with water; but he goes too far in deriving *pontifex* from **polenti-fex* 'offerer of meal'. *Arvia* is taken, with O. Müller and Huschke, to be 'exta, entrails', which must be displayed for examination as to perfect condition (51-3); in this demonstration, as in others, Bl. lists and compares all the occurrences of the word. *Tenzitim* I b 6, *tesedi* VI b 46 he takes from **tendi-sedriom* 'das beim Stossen entstehende Satz' (53-4); but this is very unlikely: loss of *r* after *d* cannot be assumed on the basis of the dubious examples in von Planta 1.298. *Vatuva ferine fetu* I a 13 and elsewhere, 'hostias ictu facito'; its position in the list of operations points to the slaying of *vatuva* (a class of sacrificial animals) with a **feriō* (abl. *ferine*), derived from *ferire* 'to strike' (54-5).

Vetu I b 29 is from athematic **veltōd*, with regular loss of *l* before *t*; *veltu* IV 21 is the same, with *l* reintroduced by analogy to the other forms; meaning 'deligito' (56). *Vesklū* I b 29 to *ves-* 'libare', not with Thurneysen to Celtic **lestro-* 'Gefäss'; translate 'Gefäss zum Spenden, patera' (56-7). *Peřaia fetu* I b 32 means that the victims are to be slaughtered while lying on the ground; corollary, the other victims stand up for their slaughter (57-8). *Puste asiane* I a 25 'colostro asinino'; cf. Greek *πυός* and **asināno-* with dissimilative loss of the prior *n* (58-9); this is entirely speculative. *Ahtu* II a 10 and 11 either 'actori' or 'numini', preferably the latter, with genitive rather than an appositive (60-1). *Fise* I a 15, *Fiso* VI b 3 'object of fear, fetish', cf. Skt. root *bhī-* 'fear', Lett. *baida* 'Schrecken' (61). *Vufiune* I a 20, *Uofione* VI b 19 hardly 'god of vows', because put alongside Jupiter Grabovius and Mars Grabovius; better **wordh-iōn-* to Greek *ὀρθός* (61). *Staflīi uves* <es>*mik* I a 31-2 is Bl.'s emendation, interpreted 'stabulati ovis, ei'; the adjective refers to an animal kept in a stall (61-2): cf. my own different interpretation, CP 15.354-6. As to *pesuntrum* I a 30 etc., Bl. rejects the interpretation as 'animal cracker', because there is no evidence for such substitutes for live offerings in Italy (62); true, but this is negative evidence only, and the principle of substitution is involved in the story of Jupiter and Numa in Ovid, *Fasti* 3.339-48. *Erus* I a 33 'wool, fleece', from **erwos*, which yields also Greek *εἶπος* (62-3). *Ahtim-em* I b 12 'on a portable altar or brazier' (66). *Ulu*, *uru* I b 18, both accusative (67). *Aitu* I b 29 not from *agito*, but to Greek *ἅγιος* 'holy', Skt. *yajati* 'he offers'; therefore **yag-yetōd* > **yayetō*, with dissimilative loss of the initial *y* (67): I consider this most improbable, since I can see no objection to *agere* in the sense of 'offer'—*facere* and *agere* continually trespass on each other's field in Latin.

Karne speturie II a 1 'parti spectoriae', that part of the Brotherhood who had the duty of viewing, therefore augural duty (68). *Virtus* II a 2, specialized in the meaning 'turn out ill' (68). *Aiu* II a 4 clearly denotes a bad thing, therefore 'nefas'; cf. Greek *ἅγιος* 'sacrilegium' (69). *Tra ekvine* II a 13 'trans equinam (viam)', cf. *tra sate* I b 31 (69). *Men-zne kurčlasiu* II a 17 'at full moon', i.e., at the Ides (69-70). *Ampeřia* II a 29 'omentum, caul', cf. Greek *ἐπίπλοφος* (70-1). *Spinia* II a 36, a pointed pillar representing a god (71). *Vepuratu* II a 41 'entwärmen, cool off', cf. *deforma* Fest. 73 Lindsay (71). *Ařmune* II b 7 'φιλίω', cf. Hesych. s.v. *ἀδαμνεῖν* (71-2). *Pistū niru* II b 15 'pisto nigro', either a ground salt blackish with impurities, or a blackish flour (72-3); but the loss of medial *g* before *r* is more than dubious. *Ranu* II b 19 'grano'

(73); this loss of *g* is also very debatable, cf. the name *Graboui*, of frequent occurrence.

Kazi III 16 'coals', from **kand-tis*, to *candeō* (73-4); but the *f* of *meſa ſpeſa* disproves such a phonetic development, cf. von Planta 1.503. *Kukehes* III 21 'intrabit', perhaps akin to Osc. *kahad* 'capiat, incipiat' (74); this fits the sense excellently, but one might rather analyze *kukehes* as **ko(m)-kēhēns*, long-vowel perfect subjunctive third plural ('the Brothers' as subject, cf. plural verbs in lines 5, 9, 11), and attribute the retention of the *k* before the palatal vowel as due to the influence of the present tense system. *Ereçlum* III 35 'sacrarium', as is generally accepted; Bl. proposes origin from **perek-elom*, with the root of *precor poſcō*, cf. Umb. *perſtu peperscuſt* etc., but borrowed from Gallic, where the initial *p* had been lost (74-5): but it may equally well come from **aiſo-kelom* (Buck §112a).

Erarunt ſtruhçlas eſ kamitu aweiſu IV 1, with rediviſion *eſkam itu*, 'eiſdem ſtruiſ eſcam ibidem addito' (75); an attractive ſolution of a difficulty. *Ueſ* V b 12, not 'portions', but a unit of weight, for which the *p* V b 14 is an equivalent borrowed from Latin (75-6).

Derſua VI a 1 = *teſvam* I b 13 is taken as **deks-uo-* 'on the right hand, favorable', for which Bl. ſets up a formulation that intervocalic *kſw* > Old Umb. (s)*ſv* > Later Umb. *rſu* (77); this ſeems to me to be leſſ likely than the accepted theory that the word comes from **dedeſwo-*, to the root meaning 'give'. *Andeſiſtu* VI a 6, *anderſeſuſt* VI a 7 do not in Bl.'s opinion yield the proper meaning if equated with *ſidere*; he normalizes to *anderſiſtu*, *anderſeſuſt* and equates with Latin *intercedere* (77-8): but the deſired meaning is not 'intercedere', but 'intrude upon'. In VI a 13-4 there is a cluster of borrowed words; *tetlom* iſ *tēctum*, perhaps borrowed from Praeſtine, where *Vitoria* iſ found for *Victoria*; *Noniar* iſ probably borrowed from Latin, cf. Latin *nōnuſ*; *Miletinar* iſ perhaps a derivative of the ſtem in Latin *mīleſ*; *Salier* iſ to be aſſociated with Latin *Salii*; *carſom* = Latin *curuſ*, cf. Greek *δρόμος* in the meaning 'ſtreet, hall', influenced in iſ vocaliſm by Gallic *carruſ*, or actually borrowed from Gallic (78-9). *Ceheſi* VI a 20, *f*-perfect of *capiō*; for *puſi pīr pureto ceheſi dia* 'ut igniſ ab igne captuſ ſit faciat', cf. Cic. de Off. 1.52 *ab igne ignem capere* (79). *Oreſ oſe* VI a 26 'illuſ fac', *oſe* being imperative of the verb ſeen in *oſatu* VI b 24 and 37 and in ptc. *oſeto* 295 (v. Pl.'ſ number) (79). *Ueiſo pēquu caſtruu* VI a 30 etc. 'viroruſ pecuū capitā', for *ueiſo* cannot be acc. pl., ſince the acc. pl. of maſc. *o*-ſtemſ always endſ in *-u* or *-uſ*, and *ueiſo* muſt therefore be gen. pl.; the colloca-tion of men and beaſtſ iſ not objectionable, ſince iſ recurſ in *dupuruſ*

peturpursus VI b 10-1 (79-80): but this involves a very rigid allotment of the forms in -o(f) and -u(f), cf. von Planta 2.117-21, and the decision that *kastru-* means 'caput' as well as 'fundus', though recent opinion has crystallized in favor of the one meaning 'fundus' only (Buck² 364). *Fato fito* VI b 11 'fata fecunda', *fito* being the exact phonetic equivalent of Latin *fēta* (80). *Anderuomu* VI b 41 should by its context mean 'in silence'; Bl. suggests **ṇ-pterḡ-uo-*, to the stem in *pro-ptervus* 'ungestüm, frech', with a superlative suffix as in *hondomu* (80-1).

Rusem-e VII a 8 and 9 'in rursum', with *io*-suffix in Umb.; this meaning is indicated by the context (81-2). *Fratrexs* VII b 1 and elsewhere, from **frātri-rēx*, with haplology, and not **frātrikos*, which would mean 'pertaining to the *frātres*' and not 'pertaining to the **frātriā*', the necessary meaning (82-3); I do not grant this assumption, for we do not know that **frātriā* was used by the Atiedian Brothers, rather than **frātrā* (cf. Ionic *φρήτρη*), or that they used any such abstract term, and there is no hint that their organization was other than democratic (cf. K. Stegmann von Pritzwald in Glotta 21.134-6).

In the foregoing I have tried to list, so far as space permits, the new interpretations which von Blumenthal has made and the old views which he has supported with new arguments; where I have offered no critique of my own, I find myself unable to combat his arguments on an objective basis—though this does not necessarily mean that I accept his view without reserve, for oftentimes two differing interpretations may both be supported by evidence seemingly of equal validity. In any case, almost all of von Blumenthal's work on the Umbrian Tables of Iguvium must receive serious consideration by scholars in the field, and a considerable part of it is destined to receive general acceptance.

ROLAND G. KENT

Studien zu den Epistulae ad Caesarem Senem de re publica. Pp. 178. By BIRGER EDMAR. Lund: Gleerupska Univ.-Bokhandeln, 1931.

Stilistische Studien zur Erweiterung der Satzglieder im Lateinischen. Pp. xii + 228. By ELMO LINDHOLM. Lund: Gleerupska Univ.-Bokhandeln, 1931.

From Lund there comes a steady stream of contributions to our knowledge of Latin style and of the historical syntax of Latin, fed by the work of Löfstedt and of his pupils. These two dissertations are worthy members of the group to which they belong; both show much industry and painstaking care in the collection and sifting and arrangement of material, and caution in formulating conclusions, though they both have

those defects which are apt to be joined to the virtues of doctoral dissertations.

Edmar is concerned with the not merely grammatical question, whether or not the political pamphlet known as the *Epistulae ad Caesarem Senem de re publica*, attributed to Sallust, is actually his work. But the problem is chiefly grammatical. It cannot be too strongly affirmed that the only way to any literature (with all its problems) is through the language. An ounce of sane linguistic analysis, in syntax, vocabulary, rhythm, or whatever is relevant to the particular enquiry, even if it ends only by showing that a positive conclusion is unattainable, is worth a hundredweight of the subjective kind of criticism that after all does little except afford a vent for the finer feelings of the critic.

Thus Edmar was able to begin by exposing the inconsistencies of previous answers. He marshalls a list of good scholars who on general, non-linguistic, grounds have pronounced the work genuine, and another list, also of good scholars, who have condemned it. There is, as it happens, no certain ancient testimony on either side. Similarly attempts made by students of history to decide the question from internal evidence primarily on historical grounds, one of the most recent being that of Last, are shown to be in large measure idle. Even the wording of the address (*senex, imperator*), the introductory phrases, personification, clichés, alliteration, orthography, phraseology, style—all these have led to contradictory pronouncements, mere 'ipse dixits'. What Vogel and Last condemned as banal and unworthy of Sallust was for Pöhlmann and Pohlenz characteristically Sallustian! Evidently there was room for a severely scientific analysis of the actual text, and this fills some 120 pages of the dissertation.

It takes the form of a running linguistic commentary in which the contents of the *Epistulae* are taken, sentence by sentence, and set beside the usage of Sallust himself, in his accepted works, and of his contemporaries. From this commentary discussion of prepositions, conjunctions, and particles is excluded; they are separately treated at the end. Here the agreement between the *Epistulae* and Sallust's acknowledged writings, for example, in such a nicety as the preference of *a* over *ab* before certain consonants (not in compound words) is, as Edmar says, striking, and if it could be shown to be peculiar to Sallust, it would also be convincing.

Finally the rhythm of clausulae is considered. In two pages of summary and conclusion Edmar admits freely the difficulty and complexity of his subject matter; but he insists (153) that 'die Mehrzahl der

Minutien vorzüglich mit dem Sallustischen Gebrauch übereinstimmt', and, without dogmatizing, pronounces in favour of accepting the *Epistulae* as Sallust's.

Lindholm's dissertation has a subject wider in its range but less tangible. Starting from the observations made by ancient and modern writers on style concerning the arrangement of words within compound phrases and sentences, and turning aside from time to time to compare the usage of other languages in this matter, Lindholm has subjected Latin texts, both prose and verse, from Plautus to the *Regula Monachorum* of Benedict, not excluding the inscriptions, to a careful scrutiny, the results of which he has tabulated, in the endeavour to discover what law underlies the wording in such groups and clauses. His conclusions seem to be more valuable as a statement of the facts observed—determined perhaps by more general principles, emphasis and rhythm in particular—rather than as a demonstration of conscious obedience on the part of Latin writers to theoretical laws of style. It is the chief merit of the dissertation that it stresses, if not avowedly, the obvious fact that vigorous and expressive Latin, like all vigorous and expressive language, is so, no thanks (or not chiefly thanks) to the rhetoricians, but because it was an instrument of expression fashioned by men who had some contribution to make to the development of important departments of human thought and intellect.

J. W.

Miscelanea Filológica Dedicada a Don Antonio M. Alcover. Pp. xix + 538. Imprenta Vda de S. Piza, Palma de Mallorca, 1932.

This testimonial volume is dedicated to the compiler of the *Diccionari Català-Valencià-Balear* upon the occasion of the publication of that work which deserves the gratitude not merely of 'catalanisants', but of all those interested in Romance linguistics. Articles are contributed by thirty scholars, nineteen of them dealing with linguistic subjects. As it is not possible even to mention them all in a limited space, only the more important ones will be dealt with.

The outstanding articles are the dialect studies, the most complete being that of Francesch de B. Moll, co-worker with Alcover on the '*Diccionari*', on the dialect of the old capital of Minorca (397-460, *Estudi Fonetich y Lexical del Dialecte de Ciutadella*). As the title indicates, the study is restricted to phonology and vocabulary, and morphology and syntax are left for a separate study. The dialect is rather more archaic than that of the surrounding territory. The

most noticeable peculiarity is that accented Latin *e, i* are in general represented by *a*, whereas in the neighboring districts, there has been a regression to *e*.

The vocabulary contains some one thousand words with phonetic transcription, precise indication of local meanings and considerable etymological discussion.

G. Rohlf, collaborator for Southern Italy on the Jud-Jaberg Atlas, contributes a study, 353-387, entitled *Le Patois de Lescun* (Basses Pyrenées). This isolated village of 597 inhabitants, which up to forty years ago could be reached only by paths and now has only the most primitive of cart roads, is in an extreme corner of Gascon territory; the next village to the west is Basque and the next one to the south, on the other slope of the mountains, is Spanish (Aragonese). The data were gathered by the questioning of a single subject, a woman of seventy-seven, supplemented by observation of the younger people and some investigation of the neighboring villages. The mountains do not appear as a linguistic barrier; rather, the mountain people on both sides of the divide have much in common to distinguish them from the people in the valleys. The outstanding characteristic is the retention of Latin intervocalic *p, t, k* in Lescun and in the nearest Spanish village, whereas these sounds are at least voiced, if not further changed, both north and south of this region. The patois of Lescun coincides frequently in vocabulary with the Aragonese, particularly as regards terms belonging to the pastoral life common to both slopes of the mountains. A vocabulary of some seven or eight hundred words is given in phonetic transcription, which bears out the statements on phonology and furnishes many forms of general interest to Romance students.

Other dialect studies are: F. Krüger, *Worfein und Verwandtes in den Pyrenäen*, 509-524, and S. Gili Gaya: *Estudi Fonetic del parlar de Lleida*.

P. Aebischer: *Noms de lieu languedociens en -ANUM accentués sur l'anté-pénultième*, 71-97, develops further P. Skok's theory that the shift of accent in names of the type *SIRANUM > *Sirán* > *Sirá*, *Síro* is an analogical development based on the proper names in /A, -ANEM. Aebischer's advance on Skok is in pointing out that in this territory we have to deal not with feminine forms declined in this way, but with masculine Visigothic names. There are several weak spots and obscurities in the argument, and it hardly seems conclusive as yet.

Among the short articles, that on Valencian *albat* by J. Ribera y Tarrago, 319-322, deserves mention as a model for the treatment of a case where there is hesitation between a Latin and an Arabic etymology.

HENRY B. RICHARDSON

NOTES AND PERSONALIA

THE HONORARY MEMBERS elected at the New Haven meeting have accepted election. The following extracts are taken from their letters to the Secretary of the Society:

Bruxelles, le 7 février 1933. Votre lettre m'a causé la plus vive joie. Je suis franchement heureux de la distinction que la Société a bien voulu me décerner. La nouvelle a du reste été accueillie par la plupart des journaux quotidiens de Belgique avec une faveur marquée.—Ém. Boisacq.

Breslau, 15.I.1933. Der Linguistic Society of America bitte ich Sie für die hohe Auszeichnung, die mir mit ihrer Ehrenmitgliedschaft hat zuteilwerden lassen, meinen verbindlichsten und herzlichsten Dank freundlichst übermitteln zu wollen. Ich schätze mich glücklich, mit der Gesellschaft, deren Arbeiten ich so reiche Anerkennung verdanke, nunmehr noch enger mich verbunden fühlen zu dürfen.

Meine bescheidenen Bemühungen um die semitische und türkische Sprachgeschichte haben damit eine Anerkennung gefunden, die mich grade jetzt, in einer durch ein schwieriges akademisches Amt besonders belasteten Zeit meines Lebens, beglückt und erhebt. Diese Anerkennung wird mir ein Ansporn sein, in der mir noch verbleibenden Arbeitszeit den hohen Zielen unsrer Wissenschaft nach meinen bescheidenen Kräften weiter zu dienen.—C. Brockelmann.

Wien, Jan. 19, 1933. I have received your letter of January 3d announcing to me that the Linguistic Society of America has elected me to Honorary Membership. In reply I beg to say that I feel greatly honoured by your election and gladly accept it. I feel proud to belong to your distinguished Society and to be one of the few scholars found worthy of Honorary Membership. Accept my warmest thanks!

You have already had the kindness to send me your publications for some years. I have read and studied them with great interest and I congratulate the Society on its important contributions to the science of language.—K. Luick.

AN INSTITUTE OF ORIENTAL PHILOLOGY AND HISTORY was established in 1931, in the Faculty of Philosophy and Letters of the University of Brussels, through the munificence of Mr. Robert Werner of Antwerp. The program for the academic year 1932-3 includes Byzantine studies,

Indo-Iranian languages and literatures, Hittite, Tocharian, Armenian, Georgian, Semitic languages and antiquities, and Egyptian law, the courses being conducted by Messieurs H. Grégoire, É. Boisacq, M. A. Kugener, I. Lévy, N. Adontz, M. Tseretheli, J. Pirenne. It is hoped to include courses in the Balto-Slavonic languages in the near future.

THE FOLLOWING NEW MEMBERS FOR 1933 have been received into the Linguistic Society subsequent to the last published list, and up to March 21, 1933:

- Dr. William F. Badè, Pacific School of Religion, 1798 Scenic Ave., Berkeley, Calif. (Director, The Palestine Institute)
Mr. David Clendenin, 84 Howe St., New Haven, Conn.
Prof. A. Henry Dahlstrom, 81 Ohio Ave., Tiffin, Ohio. (German, Heidelberg College)
Dr. Alice A. Kober, 652 Southern Boulevard, New York City. (Classics, Brooklyn College)
Prof. Sanford B. Meech, 2209 Angell Hall, Ann Arbor, Mich. (English, Univ. of Michigan)
Prof. G. Payn Quackenbos, The City College, Convent Ave. and 139th St., New York City. (Classical Langs.)
Mr. Harold D. Rose, 501 N. Dunn St., Bloomington, Ind. (Semantics, English, General Linguistics)

THE THIRD INTERNATIONAL CONGRESS OF LINGUISTS will be held at Rome, in the latter part of September, 1933, under the Honorary Presidency of His Excellency Benito Mussolini. The Permanent Committee consists of twelve scholars from different countries, with Prof. Jos. Schrijnen of Nijmegen as Secretary, and includes our fellow-member Professor Franz Boas of Columbia University, and our Honorary Members Professors C. Brockelmann of Breslau, O. Jespersen of Copenhagen, P. Kretschmer of Vienna, and A. Meillet of Paris. The Organization Committee of the Third Congress is under the chairmanship of Professor Matteo Bartoli of Turin, with Professor Bruno Migliorini of Rome as secretary. The program contemplates communications on the following general themes:

1. The individual aspect and the social aspect of language; individual style, language as the expression of classes, nations, primitive societies, etc.
2. Reciprocal influence between languages as cause of innovation.
3. The natural relation between sound and idea: phonetic symbolism.
4. The relation between the languages and the characters of peoples.

5. The extent to which it is possible to trace the morphological elements in the Indo-European languages.

6. The problem of relationship among the major linguistic groups.

7. Analogies of method between the history of languages and that of popular traditions, of figurative arts, etc.

Correspondence should be directed to Commissione Nazionale Italiana per la Cooperazione Intellettuale, Via del Conservatorio, Roma (115); the membership fee of Lire 50 should be sent to Professor Vittore Pisani, Treasurer of the Congress, at this address.

THE AMERICAN COUNCIL OF LEARNED SOCIETIES announced its regular list of Fellowships and Grants for research in the humanities, at the end of March. Among the recipients were a number of members of the Linguistic Society, as follows:

Morris Swadesh, Jr., Research Assistant in Linguistics at Yale University, received a Fellowship for research directed toward the completion of a grammar and dictionary of the Nootka language of Vancouver Island.

Grants were made to the following:

Jess H. Jackson, Professor of English at the College of William and Mary, for an edition of the two versions of the *Fortunatus Saga*.

Kemp Malone, Professor of English at The Johns Hopkins University, for a critical study of *Widsith*.

Leon O. Smith, Jr., Instructor in French at the University of Chicago, for an edition of *Partenopeus de Blois*.

Antonio G. Solalinde, Professor of Romance Languages at the University of Wisconsin, for an edition of the *General Estoria of Alfonso X*.

Lorenzo D. Turner, Professor of English in Fisk University, for a descriptive grammar of the Gullah dialect.

A PLAN IS AFOOT TO PUBLISH the *Kleine Schriften* of Wilhelm Schulze as an anniversary volume. It will probably run about seven hundred pages and cost about twenty-one marks. The whole matter is contingent upon obtaining a sufficient number of subscribers, whose names will be listed in a *tabula gratulatoria*. For further information address Professor F. Mezger, Bryn Mawr College, Bryn Mawr, Pennsylvania, who will receive and forward subscriptions.

Kenneth Scott, Professor of Classical Languages at Western Reserve University, and author of numerous studies on the cult of ruler worship in Greece and Rome, has received a Fellowship for 1933-4 on the John Simon Guggenheim Memorial Foundation.

BOOKS RECEIVED

Under this heading will be acknowledged such works as seem to bear on the advancement of the scientific study of language.

The publicity thus given is regarded as a full return for the presentation of the work. Under no circumstances is it possible to comply with the requests being made by certain publishers for the return of books not reviewed quickly.

Reviews will be published as circumstances permit. Copies of them will be sent to the publishers of the works reviewed.

For further bibliographic information consult the annual list of Exchanges.

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Deutsche Aussprache. Pp. 88. By W. KUHLMANN. Heidelberg: Carl Winters Universitätsbuchhandlung, 1933.

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Zur Frage vom 'inneren' Wert der Klauseln in der späten lateinischen Prosa. Pp. 20. By SVEN LILLIEDAHL. Linköping: Ostgöta Correspondentens Boktryckeri, 1932.

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ANOTHER INSCRIPTION OF XERXES

ROLAND G. KENT

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By the courtesy of Prof. J. H. Breasted, head of the Oriental Institute of the University of Chicago, the Illustrated London News for April 8, 1933, has a page of illustrations in color, representing recent finds of the Institute's expedition at Persepolis, under the field-directorship of Dr. Ernst Herzfeld. Among them is an Old Persian cuneiform inscription of Xerxes, on colored enameled bricks, forming a plaque to ornament a wall of the royal palace; in this function it is identical with the inscription on similar enameled bricks, found by Scheil at Susa and published by him as No. 12 of his *Inscriptions des Achéménides à Suse* (cf. my comments in *JAOS* 51.218-21 and 53.2-3), which formed a frieze about the great hall of Darius's palace at that place.

The present inscription is in fourteen lines, each of one row of six bricks (if we may trust the slight indications in the illustration); the background is of greenish-blue, while a yellow marginal band makes easy the identification of the edge fragments: the whole is said to have been put together out of over 100 pieces. The text is, except at one point, quite certain, for the mutilated characters and those lost in the gaps (indicated in the picture in black on an uncolored background) are readily restored by the formulaic phrases.

Line 8, where the second brick is lost, offers the only difficulty. The first brick bears the *na-a* which concludes the familiar word *vašnā* 'by the will', after which we expect *Auramazdāha* 'of Ahuramazda', which indeed does follow, but not immediately: it starts with the last character of the third brick, on which stands *ya / a*. Now the spacing is quite regular, every line having 14 or 15 characters (among which I include the word-dividers) in all. Each short brick bears two or three characters, three resulting in crowded spacing; sometimes a character is divided between two bricks. Now as the *ya* of brick 3 stands close to the left margin of the brick, it is clear that brick 2 bore but two characters. The illustration in the London News shows a restored divider and a blank; in which instance a word written with two characters, the second

of which was *ya*, separated *Auramazdāha* from *vašnā*. The only such words as yet known are *ha-ya* = *hya*, nom. sg. masc. of the demonstrative-relative, and *ta-ya* = *tya*, nom.-acc. neut. of the same; with a third possibility of *i-ya* = *īy*, nom. sg. fem. (Bh. 4.90, cf. JAOS 35.348 n.). No one of these would in this place yield a meaning; the alternative is that there stood in this place an enclitic of three characters, the last of which was *ya*. Of such we have the pronouns *mai*y, *tai*y, *šai*y, possibly *dai*y, no one of which is appropriate; there is also the enclitic *-ci*y, = Avestan *čī*t, Skt. *cid*, which as one of its uses gives emphasis when attached to the first word of the second of two parallel propositions, cf. Bartholomae, AiW 588-9. This is precisely the usage in the present passage, where the enclitic which we are seeking was attached to *vašnā* at the start of a second assertion opening with the same pious acknowledgment to the deity.¹

The inscription, in normalized form, therefore runs as follows, entirely lost characters being indicated by italics:

- 1 θātiy | Xšayāršā
- 2 xšāyaθiya | vazarka | vaš-
- 3 nā | Auramazdāha | vasai-
- 4 y | tyā | naibam | akunau-
- 5 š | utā | frāmāyatā |
- 6 Dārayavauš | xšāyaθiya
- 7 | hya | manā | pitā | vaš-
- 8 nāciy | Auramazdāha
- 9 | adam | abiyajāvayam
- 10 | abiy | ava | kartam |
- 11 utā | frataram / akuna-
- 12 vam / mām | Auramazdā
- 13 | pātuv / hadā | bagai-
- 14 biš | utamaiy / xšačam

'Says Xerxes the great king: By the will of Ahuramazda much that (is) beautiful Darius the king, my father, built and ordered (to build). By

¹ At the same time, while adopting *-ci*y in the text, I feel that the enclitic may perhaps have been rather *-di-i-ya* = *-di*y (Avestan *zī*, Skt. *hi*), a similar emphatic particle which I still believe is to be recognized in *ufraštā-di*y Bh. 4. 69 (JAOS 35.351-2 and 51.229 n.), perhaps also in *j'vadi*y Art. Susa 28 Scheil (cf. JAOS 51.228-9).

[Since I wrote, Benveniste has discussed this inscription in BSLP 34.1.32-4, and proposes *api*y 'also'; but the vacant space does not suffice for /*a-pa-i*. If he is right, there must be enclisis and crasis: *nā(pi)y*.]

the will indeed of Ahuramazda I added to that (which had been) built, and built additional (construction). May Ahuramazda along with the gods protect me and my kingdom.'

The text contains three words which should receive comment.

In line 5, *frāmāyatā* is a new word, the 3d sing. pret. ind. mid. of *fra* + *mā(y)*-, glossed by Bartholomae, AiW 1166, on the basis of Avestan occurrences, as 'anordnen, befehlen'; it is already known in Old Persian in the derivatives *framātar*- 'lord' and *framānā*- 'command', and in the participle *framātam* 'commanded, ordered', the probable reading in Darius's Record at Susa (19-20, restored, and 56, partly restored, after Herzfeld; see JAOS 53.6, 8, 12, 22).

In line 9, the writing *a-ba-i-ya-ja-a-va-ya-ma* = *abiyajāvayam* indicates that *a-ba-i-ja-a-va-ya-ma* = *abijāvayam* in line 40 of the inscription of Xerxes found in 1931 by Herzfeld at Persepolis (see LANG. 9.43) is merely a careless writing, with omission of one character. The idiom *abiyajāvayam abiy ava kartam* 'added to that (which had been) built' is to be compared with *aniya kartam abijāvayam* 'added other construction' of the other inscription.

In line 11, the writing *fa-ra-ta-ra-ma* can be normalized only *frataram*, and the word must be equated with Avestan *fratara*- 'prior' Skt. (adv.) *pratarām* 'farther, more distant', Greek adj. *πρότερος*, adv. *πρότερον* 'before (in time or place)'. But with it we must compare *fa-ra-θa-ra-ma* = *fraθaram* or *fraθram*, in the corresponding phrase of Herzfeld's other Persepolis inscription of Xerxes, lines 26-7, on which, after Herzfeld, I remarked (LANG. 9.39-40) that it seems almost impossible not to equate it with the *frašam* which is found twice in lines 56-7 of Darius's Record of the Palace at Susa. The form *frataram* cannot be equated etymologically with *frašam*, while *fraθ(a)ram* may be normalized in a form which goes with either, but not with both at the same time. It looks as if there were two words of separate origin, *frataram* and *frašam*, which had evoked a mixed form, *fraθram* or *fraθaram*. Perhaps, however, Weissbach is right (Zts. f. Assyr. 41.319) in taking *fa-ra-θa-ra-ma* as *fraθaram*, a comparative corresponding to the Skt. superlative *prathama*-, with medial aspirate; he glosses it with 'vortrefflich, hervorragend'.

The other Persepolis inscription of Xerxes, which I presented in LANG. 9.35-46, has been discussed at length by Benveniste in Bull. Soc. Ling. 33.2.144-56, and briefly by Weissbach in Zts. f. Assyr. 41.318-21.

A NOTE ON THE DEVELOPMENT OF THE INDO-EUROPEAN DENTAL GROUPS

M. B. EMENEAU

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Prof. R. G. Kent in his article, *The Development of the Indo-European Dental Groups*, *LANG.* 8. 18-26, has advanced a theory, which is undoubtedly correct, to explain the development of a non-morphological dental sibilant between the members of the morphologically-developed group dental stop + dental stop. Primitive Indo-European at the time when this development took place had in its phonemic system no long consonants.¹ Consequently the group dental stop + dental stop could not be actualised in speech as a long dental stop (which would presumably have been simplified at once), but was actualised through analogical workings as a 'doubled' consonant, i.e. the breath was released after the first stop and a second stop was then formed. The breath-release is indeed audible enough in such a type of articulation. That it 'became stronger in an effort to articulate clearly, the ultimate product being the dental sibilant', appears doubtful. It seems more probable, from a phonetic point of view, that the sibilant fricative resulted from the manner in which the stoppage was broken by the tip of

¹ Cf. Hirt, *Indogermanische Grammatik* 1. 254-7. This period antedated the separation of Hittite from the PIE stock; E. H. Sturtevant, *LANG.* 9. 6, shows that Hittite has the group *-tst-* where all the other languages have *-st-* or the *-tt-* or *-ss-* that resulted from analogical restoration or change.

Apart from the group dental stop + dental stop and the group *ss*, no morphological development of double consonants can be demonstrated for PIE. Double gutturals would appear if to a stem ending in a guttural were attached a formative suffix beginning with one, but no such case has appeared. The similar hypothetical case for labials would in any case be rare; as no regular development of plural cases had appeared before Hittite left the PIE stock (Peterson, *AJP* 51. 251-272), the *bh*-cases of stems ending in labials are all new formations. The long consonants in the 'Koseformen' cited by Hirt, if they are to be attributed to PIE, are the product of 'rhetorical' lengthening, which may affect both vowels and consonants in any language regardless of its phonemic system and is particularly at home in this class of words.

the tongue. A clean movement of the tip from the point of contact would not result in a fricative; a less complete break of the contact, whether due to comparative immobility of the organ or to lack of time to complete the break, would produce a fricative. This mechanically-formed fricative might in time become an essential element of a double dental group, and so it is assumed that it happened in PIE. What the fricative would be, sibilant or interdental spirant, cannot be predicted. It would depend in part on the exact point at which the original contact was made, in greater part on the fricatives which were to be found in the language's phonemic system. Such points cannot be profitably argued for a reconstructed language, but it may be said that PIE possessed the sibilant *s* (*z*), but not the interdental spirants *θ*, *δ* (while the existence of *θ*, *δ* has been postulated, they certainly did not exist as free phonemes).

Morphologically doubled consonants are variously actualised. They may result in long consonants, as in Sanskrit or in English (in word sandhi only; so in *that time*, *pen-knife*, but not in *severally*; in such words as *fineness*, in which *-nn-* may be long or short, the suffix *-ness* hovers in feeling between the status of suffix and second member of a compound). In these two languages long consonants form no part of the phonemic structure, as they do in Finnish; in the mechanism of the language they represent short consonant + short consonant. Or, doubled consonants may be simplified to short consonants, as in English within simple words (*severally*) or in Takelma.² Or, they may remain as doubled consonants. This last type of articulation, though it does not occur in any of the more familiar languages of Europe, is not so rare in the languages of the world as this might seem to indicate. It is found in the related Nootka and Nitinat dialects of the Wakashan group of languages of British Columbia,³ in the Washo language of Nevada and California,⁴ and in the Wishram dialect of Upper Chinookan, spoken in the State of Washington. Citation of some examples from the last-named language may be of interest as indicating that the phonetic situation that Prof. Kent envisages is very possible.

² E. Sapir, *The Takelma Language of Southwestern Oregon*, 42-43. This grammar is in *Handbook of American Indian Languages*, Bulletin 40, part 2, of Bureau of American Ethnology.

³ I owe this detail to Dr. Morris Swadesh.

⁴ Dr. Walter Dyk gives me this information.

The Wishram language⁵ has no phonemic long consonants.⁶ Its morphology, however, in many places leads to double dentals and double palatals, though not, it appears, to double labials or velars. These double stops are articulated as two stops, the first having in its release a somewhat stronger aspiration than the corresponding stops have as finals or between vowels. The following are examples of double dentals:

- ittúłmax* 'fires' (distributive); *it-* plural appositive, stem *-tul*, *-max* distributive or pluralising suffix; cf. *wátul* 'fire', *wa-* fem. sg. appositive.
ittaúcamax 'gunny-sacks'; cf. *itaúca*, *i-* masc. sg. appositive.
ittp'áq 'sore on the buttocks', plurale tantum, stem *-tp'aq*.
itkwiłc 'animal necks', (such as necks of deer or salmon, when they are alienably possessed; when it is a matter of inalienable possession, the related stem *-tuk* is used); cf. *itkwiłc* 'animal necks that I own', *-k-* 'my'.
ittqə'p 'stinginess', plurale tantum; cf. *idiatqə'p* 'he is stingy' lit. 'his stinginess', *it-* (*t* before vowel > *d*), *-ia-* 'his', stem *-tqəp*.
ittq'in 'sperm-sacs in a male fish', stem *-tq'in*.
ittxágumat 'the salmon (pl.) of us two (inclusive)'; *-txa-* 'of us two' (inclusive; exclusive *-nda-*), stem *-gunat*.
tcttqwił 'he is bringing them'; *tc-* 'he' subject of transitive verb, *-t-* 'them', *-t-* 'hither'-directive, *-kwi-* (surd becomes sonant before vowel) stem 'carry, remove, throw', *-t* present tense.

⁵ The last-published account of a Chinookan dialect is Boas, Chinook, in Handbook of American Indian Languages, Bulletin 40, part 1, of Bureau of American Ethnology 559-677; bibliography of previous publications 564, notes 1-5. The most important of those relating to Wishram is Sapir, Wishram Texts, Publications of the American Ethnological Society, 2 (1909). The language described by Boas is a Lower Chinookan dialect, different in details from Wishram but with the same fundamental structural principles. Prof. Sapir's linguistic seminar in 1933 had the benefit of working for two months with Dr. Walter Dyk's Wishram informant, Phillip Kahclamat (*yanukwaikt qallamak*); he is much younger than the informants from whom Prof. Sapir obtained his Wishram Texts, and his dialect probably differs slightly from that recorded by Prof. Sapir. Mr. Dyk has given me some material beside that which was obtained in the seminar. The transcription used is that of the International Journal of American Linguistics. The palatal stops and continuant (*k*, *g*, *x*) of Wishram are made in the position of English *k*. The velar set (*q*, *g*, *ɣ*) are formed very far back and are never confused with the palatal set. Both sets have labialised forms. *p'*, *t'*, *q'*, *t'c*, *t's* represent glottalised consonants, and not consonant + glottal stop.

⁶ I shall confine myself to the stops of the language. Doubled continuants which appear in the proper morphological circumstances are actualised as long continuants differentiated from the short by syllabic distinctions.

nicttdámnit 'he came within the last year several times to sell them';
ni- past tense 'within the last year', *-tc-* 'he', *-t-* 'them', *-t-* 'hither'-
 directive, *-t-* (> *-d-* before vowel) stem 'sell', *-am* 'arrive, come to do
 so-and-so', *-nit* iterative. After each *t* there is release of breath
 before the following dental is formed.

In the following appear double palatals:

itkka 'they flew thither'; *i-* recent past time, *-tk-* represents theoretical
-t- 'they' + *-u-* 'thither'-directive, *-ka* stem 'fly'. *itikka* or *itikká*
 'it flew over him'; *-t-* 'it' neuter sg. subject, *-i-* masc. sg. indirect
 object, *-k-* 'on, over'; *-u-* 'thither'-directive, which is theoretically
 present immediately before the verb stem in this and the next
 three forms, is represented by zero (it is seen in such forms as
inhya 'I went', *-n-* 'I', stem *-ya-*: *-i* 'go, come').

tciakk^wthwáq^wt 'he is making him sneak up on her'; *tc-* 'he', *-i-* 'him'
 direct object, *-a-* fem. sg. indirect object, *-k-* 'on, over', *-k^wthwa*
 stem 'make sneak' (for 'sneak' a reflexive form is used), *-q^w-* 'up to,
 against', *-t* present tense.

yackgápqt 'he is going into the house'; *i-* 'he' subject of intransitive verb,
-ac- 'two things' indirect object, *-k-* 'on, over', *-ka-* stem 'move
 fast' (*k* > *g* before vowel), *-pq-* 'into the house', *-t* present tense;
 the 'two things' are an uninterpretable petrified reference in this
 verb-form.

tciakgwikt 'he is lifting him over her'; *tc-* 'he', *-i-* 'him', *-a-* fem. sg.
 indirect object, *-k-* 'on, over', *-kwi-* 'carry, etc.' + *-k^w-* 'around,
 about' form a stem 'lift', *-t* present tense.

Prof. Sapir in his *Wishram Texts* recorded four words with θ between
 double dentals. This θ he describes as a 'voiceless dental (or alveolar)
 spirant, approximately like English *th* in *thin*, or perhaps better like
 lisped *s*. Found only between dental (or alveolar) stops.' The words
 follow, in normalised spelling according to Mr. Dyk's system.

6.14 *mtθl'sinun* 'you two are birds'; *mt-* 'you two', *-t'sinun* stem 'bird'.

6.18, 22 *amtθdimama* 'you two will arrive'; *a-...-a* future tense, *-mt-*
 'you two', *-t-* (> *d* before vowel) 'hither'-directive, *-i* stem 'go,
 come', *-mam* 'arriving'.

80.4 *iθt'úkti* 'they are good'; stem *-t'ukti*.

148.18, 26 *iθt'cánk* 'deer (pl.)'; stem *-t'cank*.

This θ is not heard in the speech of Mr. Dyk's informant and he has never heard it from any others of the Wishram. Prof. Sapir thinks that it may represent a slight dialectal difference. But until it is attested as a regular feature of some Upper Chinookan dialect, it would be unwise to press this θ as a parallel to the PIE development of s between double dentals. It is worth noting that Wishram has no phonemic interdental spirant θ , and that s appears in the language only as the representative of the sibilant c in diminutive symbolism; see Sapir's section on Diminutive and Augmentative Consonantism in Wishram, in Boas, Chinook 638-45. The stem $-t'sinun$ 'bird' is the (petrified) diminutive form of $-t'cinun$ 'eagle' (the affricative $t'c$ diminutivised $> t's$).

Ἄπο-, Ἐπι-σιμόω

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Of these compounds the example of particular interest, because of the uncertainty of the meaning, is that in Thuc. 4. 25. 5 of a movement of ships: ἀποσιμωσάντων ἐκείνων καὶ προεμβalόντων. The general idea, at least, is clear in Xenophon's πρὸς ἐκείνους μὲν οὐκ ἦγεν, ἐπισιμώσας δὲ πρὸς τὴν πόλιν ἦει *Hell.* 5. 4. 50. The Thebans had occupied a strong position some distance from the city to *meet* (ἀντετάξαντο) the approaching army of the Spartans. If, as is probable, they had placed themselves between the city and the enemy, the movement of Agesilaus must have appeared like an attempt to go around the occupied position. Xenophon calls it a clever ruse on the part of Agesilaus because, πόρρω ἀπαγαγὼν ἀπὸ τῶν πολεμίων, he caused them to leave their position and run to save their unprotected city. The Spartans get into a position to make some attacks upon them as they run by (παρὰθεόντας). Whatever then, the exact force of ἐπισιμώσας, and, in particular, of the ἐπι-, it is evident that the Spartans made some kind of turning movement.

The passage in Thucydides describes encounters of the Syracusan and Athenian fleets. This was in 427 B.C., before the Syracusans had had experience of Athenian skill. They were anxious to make a test while the Athenian ships were few: ναυμαχίας ἀποπειρᾶσθαι ἐβούλοντο, ὀρῶντες . . . τὰς . . . παρούσας ναὺς ὀλίγας (4. 25. 3). In the strait of Messene they put out against the Athenians, were beaten, and quickly sailed back to their camps. While the ships were at anchor and the crews on shore, the Athenians attacked, but lost a ship that was caught by grappling irons. *After that* the Syracusans embarked and were being towed along the shore, when the Athenians attacked again and lost another ship, ἀποσιμωσάντων ἐκείνων καὶ προεμβalόντων. The ancient grammarians give us definitions of ἀποσιμόω which allow us to assume either that the Syracusans drew their ships up on shore or that they put to sea and attacked the Athenians. Eustathius, speaking of the Greek ships drawn up on the shore at Troy (*Ξ* 35) says: ἐπὶ ξηρᾶς εἶχον τὸ πρόκροσσον καὶ ὑψηλότερον ἴσταντο αἱ πρὸς τῷ τείχει. καὶ ἦν ἴσως καὶ τοῦτο ἀποσιμοῦσθαι,

ὃ ἐστὶν ἀπὸ σιμοῦ καὶ κοίλου τόπου ἀνῆχθαι ὑψοῦ and ἀπεσίμωσε τὸ ὑψοσε καὶ πρὸς τὸ λαμπρότατον ἤγαγε. The important point here is not the mistaken derivation ἀπὸ τοῦ σιμοῦ...τόπου, but the evidence that the meaning *drawn up on high* was traditional. The ἀποστρέφειν (ἀποτρέχειν) πρὸς τὸ σιμόν of Hesych. and Etym. Mag. has the same implication (cf. Hes. ἱσίμιον·αἰγιαλός). Eustathius adds to the above ἀλλὰ καὶ ἀποσιμῶσαι τὸ μετεωρίσαι ναῦς παρὰ Θουκυδίδη; cp. Suidas and Bekker. Modern editors have accepted this latter interpretation for Thucydides; Smith (Loeb) has 'the Syracusans *made a sudden turn outwards* and charged them first'. The grounds for this conclusion are, presumably, the μετεωρίσαι of the grammarians, Xenophon's use of ἐπισιμῶσας, but most of all the fact that προεμβάλλω is used by Polybius (16. 3. 2) of a ship charging first. It is the last fact, I have no doubt, that influenced the ancient grammarians, for it is evident from the whole comment in Eustathius, that the meaning he gives to ἀποσιμῶ in Thucydides is different from his idea of its general use.

Now it is obvious that the Syracusans were not so situated that they could get themselves into position to ram first the more expert Athenians. While they were towing, the oars on the shore side at least, even if in the water, could not be effectively worked. It would take time to head the ships around. Besides, the Syracusans had just been beaten in an open sea fight, whereas the Athenians had lost a ship when they attacked the Syracusans at anchor. Under the circumstances, the Syracusans were much more likely to get their ships on shore out of danger, and the tow-rope would aid in doing that easily and quickly.

The new edition of Liddell and Scott gives ἀποσιμῶν τὰς ναῦς *cause to swerve* Th. 4.25, ἀποσιμῶσις *turning a ship aside* App. B.C. 4.71; ἐπισιμῶν 'seemingly intr.' *turn aside one's course* X. H.G. 5.4.50. Fraenkel, Griech. Denom. 155, has: ἀποσιμῶσαι, sc. τὰς ναῦς Bogenlinien mit den Schiffen machen Thuc. 4.25, ebenso ἐπισιμῶσας sc. τὴν στρατιάν das Heer eine Bogenlinie bilden lassend Xen. Hell. 5.4.50. Boisacq, Dict. Etym. Lang. Grec. says: ἀπο- ἐπι-σιμῶν 'manoeuvrer de côté en demi-cercle' (Thuc. Xén.), and cites Solmsen, IF 30.3, who gives Fraenkel's definitions. Two things are to be noted about these interpretations. First, no attempt is made to explain why ἐπι- and ἀπο-σιμῶν should mean the same thing. In the second place, all the evidence, apart from the Thucydides and Xenophon passages, goes to show that σιμῶν meant 'to make oneself σιμός', as λορδοῦν means 'to bend oneself backwards.' The only object-accusatives that are cited are parts of the body, ἰγνύαν, αὐχένα, νῶτα; cp. ἐπισιμῶσαντες...τὴν

προβοσκίδα οἱ ἐλέφαντες Ael. NA 8.10. Diogenes, comparing his skull with that of Maussollos, says τὰς ῥίνας ἀποσειμώμεθα Luc. Dial. Mort. 24. ὅποσοι σιμοῦνται διὰ τὴν κάτῃξιν (Hippocr. Art. XXXV) means those 'whose nose is rendered concave by the fracture' (Withington: Loeb). We have no right to supply an object ναῦς in Thuc., or στρατιάν in Xen. We may, of course, assume that Agesilaus, ἐπισιμώσας, is identified with his army, and that the Syracusans, ἀποσιμωσάντων, are identified with their ships; but that does not justify us in the assumption that the army or ship 'moves in a direction that is σιμός'. The words ought to mean that the army or ship 'makes itself σιμός', with the addition of whatever ἀπο- and ἐπι- may imply.

The fundamental meaning of σιμός is 'hollow, concave'. It is not both 'concave' and 'convex', though naturally, when certain things are bent in a curve, they will be concave on one side, convex on the other. It is the concave side to which σιμός applies. Even in Xenophon's ἐκ δὲ τῶν ὑπερδεξίων ἔβαλλον. οἱ δ' ἐπεχείρησαν μὲν πρὸς τὸ σιμόν διώκειν (Hell. IV. 3.23), where the ὑπερδεξίων shows that the pursuit was uphill, or in τούτῳ προσαναβῆναι τὸ σιμόν δεῖ (Schol. on Ar. Lysistr. 288) we may recognize that the combination of a level surface with the upward slope of a hill presents a concave appearance. Xenophon contrasts σιμός and γρυπός in πρὸς οὖν τὴν σιμότητα. . . ἡ γρυπότης ἄριστ' ἂν προσαρμόσειε τῶν μὲν γὰρ μεστῶν γρυπὴ ἢ γαστήρ γίγνεται τῶν δὲ ἀδείπνων σιμή Cyr. viii. 4.21, and the *bent-in* meaning is clear in ὅποσοις μὲν οὖν ρὶς ἐς τὸ κάτω καὶ ἐς τὸ σιμόν ῥέπουσα καταγῇ Hippocr. Art. 37. Perhaps the most common meaning of σιμός is 'snub-nosed', and there is no reason why the compound ἀποσιμόω may not have been first used in the sense 'turn up one's nose, snub', with the idea of *rejection* of another's advances, the ἀπο- having the same force as in ἀπειπεῖν, ἀποδοκεῖ. ἀποσκώπτειν gives an excellent parallel. When the head is thrown back, the ordinary nose looks like the snub. Hesychius gives evidence for the uncompounded σιμοῦν in the sense of μέμψεσθαι, and for διασιμοῦσι = διακωμῶδῶνται (see σίλλω). The first definition of ἀποσιμῶσαι in Bekker and Suidas is τὸ ἐπικύβαι καὶ τὴν πυγὴν προτείνειν (προθεῖναι) γυμνήν. Here we have the obscene gesture denoting insult and rejection, derived from the use of ἀποσιμοῦν in its regular sense of scorn and rejection. Photius (Erotian), s.v. λорδός, has λордότατον, τὸ ἀποσειμωμένον καὶ ἐναντίον τῷ κυρτῷ, and λордός is used of the bent-back body (Hippocr. Art. 46, 48). There is no doubt, then, that ἀποσιμοῦν was applied to the thrown-back head and upturned nose. The application of σιμός to the prow of a ship is seen in ἡ δὲ σάμαινα ναῦς ἐστὶν ὑπέρωρος μὲν τὸ σίμωμα Plut. Pericl. 26.

The concave curve of the prow of war-ships may be seen in many ancient illustrations; Torr, *Ancient Ships*, figs. 12, 13, 17, 19, 23, 28. It may fairly be assumed, then, that ἀποσιμοῦν 'to turn up one's nose', as applied to men, was transferred to ships to express the idea of raising the prow and exposing the *ram*, by transferring weight to the stern. In the sea-fight described by Polybius (16.3.4) blows are struck in ramming both below water (ὑφάλους) and above water (ἐξάλους). The former are made by depressing the prow: ἐμπρῶρα τὰ σκάφη ποιοῦντες τοῖς πολεμίοις ὑφάλα τὰ τραύματα διδόντες (16. 4.12); the latter by raising it: πρὸς ὀκτῆρη συμπεσὼν αὐτὸς μὲν ἔξαλον ἔλαβε τὴν πληγὴν, ἀναστεῖρου τῆς νεὼς οὐσης (16 3.8), where ἀναστεῖρος must be the opposite of ἐμπρῶρος and mean 'with raised stem', and not 'with a high prow' as Liddell and Scott give it. The method of raising the prow is given by Arrian—ἔρματα ἐς τὴν πρύμναν ἐνέθεσαν, τοῦ ἐξᾶραι ἐς ὕψος τὴν πρῶραν πιεζομένης κατὰ πρύμναν τῆς νεὼς *Anabasis* 2.19.

The following passage from Galen (18.2.347 Kühn) becomes clear on the assumption that ἀποσιμοῦν, used of ships, means 'to elevate the prow so as to expose the ram': ἐνιοι ἐκ μεταφορᾶς οὕτως εἰρησθαί (i.e. ὅκωσπερ οἱ τοξεύοντες ἐπὴν τὸν ὤμον ἐμβάλωσιν) φασιν ἀπὸ τῆς ἐμβολῆς τῶν νηῶν, ἃς ποιοῦνται καταδύσαι βουλόμενοι τὰς ἐναντίας. ὅταν γὰρ ἀποσιμώσαντες τὴν πρῶραν ἐπιτηδεῖαν ἐργάσωνται πρὸς τὸ σφοδρῶς ἐβραγεῖσαν ἐφ' ἐτέραν [εἰ]¹ καὶ μάλιστα κατὰ τὸ πλάγιον ὅλην αὐτὴν διαλύσαι τε καὶ καταδύσαι, παρεσκευάσθαι φασιν ὡς εἰς ἐμβολὴν τῆνικαῦτα. Καὶ παρὰ τοῖς κωμικοῖς δὲ τὰ προτεινόμενα τοῦ σώματος ὡς εἰς ἐμβολὴν παρεσκευάσθαι λέγεται, καθότι καὶ ὁ Ἀριστοφάνης ἐδήλωσεν εἰπὼν· Χωρεῖ 'πὶ γραμμὴν λорδὸς ὡς εἰς ἐμβολὴν. Here the points to be noted are: (1) The τὰ προτεινόμενα τοῦ σώματος and the preceding reference to the extended arm of the archer make it clear that the projecting ram of the ship is the point of the comparison. (2) The λорδός of Aristophanes, which applies to τὰ προτεινόμενα τοῦ σώματος, will apply to the projecting ram, and recalls the λорδὸν·τὸ ἀποσεσιμωμένον of Photius. (3) We get a much better meaning for 'making the prow ready for sinking', if ἀποσιμοῦν means 'to elevate the ram', than if it means 'to make a curve in its course'. If any think that μάλιστα κατὰ τὸ πλάγιον implies a movement so as to strike the enemy ship 'on the side', it may be pointed out that κατὰ τὸ πλάγιον has a much wider meaning, that it can apply to any blow struck 'obliquely', and that 'obliquely as possible' just suits the upward blow struck by the elevated ram. The passage may be rendered thus: 'when by elevat-

¹ I have bracketed the εἰ.

ing the ram, they make the prow ready for making a breach in and sinking another ship by dashing against it violently and at as great an upward angle as possible.'

But if this meaning is applied in Thuc. 4.25 ἀποσιμωσάντων καὶ προεμβalόντων, what is to be done with προεμβalόντων? Diodorus uses the word in a general way of a land-army beginning an attack (15.81). That will not suit here, since the preceding words state that the Athenians attacked—προσβαλόντες οἱ Ἀθηναῖοι—and the Syracusans' movement was the result. Polybius (16.3.2) has προεμβalών in the description of the meeting of two ships, where one manages to ram first the other and sink it. If ἀποσιμωσάντων in Thucydides means 'made a sudden turn outward', then προεμβalόντων should mean 'rammed them first'. But the statement is quite general and should apply to *all* the Syracusan ships; and that is quite incredible. They would have been lucky if one ship had managed it. Further this interpretation implies that a general engagement took place. At this date in the war Thucydides would not have passed over an Athenian defeat at sea without comment. What he does say is καὶ ἐν τῷ παράπλῳ καὶ τῇ ναυμαχίᾳ τοιοῦτοτρόπῳ γενομένη οὐκ ἔλασσον ἔχοντες οἱ Συρακόσιοι. The Classen-Steup edition says that ναυμαχία refers to the preceding attack on the ships at anchor, a statement that has as little foundation as the preceding one that it was 'mit den zunächst bedrohten Schiffen' that the Syracusans managed to make a movement that resulted in their ramming first one ship of the enemy. Smith (Loeb) translates: 'in the passage along the shore and in the sea-fight that followed in this unusual fashion', which leaves the mistaken impression that it was the way in which the sea-fight came about that was unusual. What Thucydides says is 'in that kind of sea-fight', which means that it was not a regular sea-fight at all. But it would have been if the Syracusans had put to sea and attacked the Athenians. Herodotus 4.183 uses προεμβάλλω of the oxen that had to feed backwards, because if they moved forwards their horns 'ran into the ground in front', προεμβalλόντων ἐς τὴν γῆν τῶν κερῶν. This suits the Syracusan situation admirably. The crews are on board but not at their oars. By withdrawing to the stern they throw the bows high in the air, and the men at the tow-ropes pull the bows forward on shore. Anyone that has run a row-boat or canoe up on the shore—minus the tow-rope—knows the method. And 'in that kind of sea-fight', says Thucydides, the Athenians came off second-best.

The ancient grammarians knew that ἀποσιμοῦν meant 'snub', that it was used by the poets of comedy for the corresponding indecent gesture with the back turned, and that τὸ ἀποσεσιμωμένον was λορδόν 'bent back', but they were puzzled by its application to ships. That is evident from the second definition in the scholia—τὰ σημεῖα τῆς ξυμμαχίας ἀραμένων καὶ ἀναδειξάντων—and from the doubt expressed in the καὶ ἤν ἴσως καὶ τοῦτο ἀποσιμοῦσθαι of Eustathius. Though Eustathius ends his note with ἀλλὰ καὶ ἀποσιμῶσαι τὸ μετεωρίσαι ναῦς παρὰ Θουκυδίδη, it looks as if his other definition—ἀπὸ σιμοῦ καὶ κοίλου τόπου ἀνῆχθαι ὑψοῦ—was based upon an inherited interpretation of Thucydides, for it combines in one word the idea expressed by Thucydides' two—ἀποσιμωσάντων and προεμβαλόντων. The ἀποστρέφειν (ἀποτρέχειν) πρὸς τὸ σιμόν of Etym. Mag. and Hesych. (note the latter's † σίμιον· αἰγιαλός) seems to be an attempt to explain the same idea by combining a phrase like Xenophon's πρὸς τὸ σιμόν διώκειν with an ἀπο-. The first definition in the scholia—ὑπαναχωρησάντων καὶ μετεωρισάντων τὰς ναῦς—also attempts to do something with ἀπο-. In view of their situation, it would be difficult to say what movement of the Syracusans could be described by ὑπαναχωρεῖν.

There is little evidence on which to base an explanation of ἐπι-σιμόω. I make the following suggestion. Both in the turning up one's nose and in the indecent gesture of comedy, the body is bent away from and the σιμός or 'concave' view is away from the person insulted. Thus, even if the ἀπο- of ἀποσιμῶω was originally used as in ἀποδοκεῖ, ἀποσκώπτειν, it may have been the pattern for an ἐπι-σιμόω in the sense of 'making oneself σιμός or concave toward', the ἐπι- being used as in ἐπικύπτειν 'bend toward' τῷ συνεδρίῳ (Luc. Jup. Tr. 11). The only example of the compound cited besides that in Xenophon is Aelian's ἐπισιμώσαντες δὲ καὶ τὴν προβοσκίδα οἱ ἐλέφαντες καὶ ὑπὸ τοῖς κέρασι πτύξαντες ὥσπερ οὖν νεὼς ἔμβολον . . . φερομένης ἔσπεσόντες . . . πολλοὺς ἀνατρέπουσι NA 8.10. From the comparison with the charge of a ship it seems fair to assume that ἐπισιμοῦν applied to the trunk means that it was put into the shape of the prow of a ship—the tusks being the ram—that is, with a *concave* (σιμός) curve toward the enemy. We can not know how Aelian thought the tip of the trunk was curled up under the tusks. In any case, that is put as a separate action. Since ἀποσιμοῦν was used as a technical term in naval warfare, it would not be surprising if ἐπισιμοῦν was used to describe the evolutions of a body of foot-soldiers. If an army in battle-line, marching due west, were by gradual evolution to transform itself into a column marching south-west, it would present to an observer in

the east an angle of 135° until the evolution was completed, that is, the *σιμός* view would be toward the spectator. It is probable enough that the Spartans could make such evolutions and that Xenophon knew the technical terms for them. Such a movement would suit the situation as he describes it.

THE GERMANO-CELTIC VOCABULARY

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[An attempt to distinguish and classify the inherited vocabulary peculiar to Germanic and Celtic.]

The exact relation between the Germanic and Celtic dialects is still unsettled, though doubtless no one will ever dare maintain anything like a Germano-Celtic unity. Nevertheless some advance has certainly been made in this direction by Prof. Marstrander in his recent attack upon the Italo-Celtic unity.¹ Yet one is not quite ready to set aside the phonetic arguments for such unity as '*dépourvus de toute valeur*'. Indeed, and it is here that Prof. Marstrander is right, the weakest support of an Italo-Celtic unity is in point of view of vocabulary—exactly the point in which Germanic and Celtic present such a remarkable agreement. However Prof. Marstrander's objections are mostly of a negative character—an enumeration of disagreements between the Italic and Celtic vocabularies. On the other hand, what can be said of the Germanic and Celtic agreement?

Several times already there have been compiled lists of words which indicate a cleavage between the vocabulary of the Celts and the Germans on the one hand and the rest of the 'European' dialects on the other and which may be significant of a separate linguistic and cultural development. The first attempt of this sort was that of Ebel in his article '*Die Stellung des Celtischen*' (Kuhn's *Beiträge* 2. 137ff., esp. 173-79). Many of these supposed agreements are of course now known to be loanwords, still others are to be rejected entirely. In recent times more carefully weighed discussions of the Germano-Celtic vocabulary are those by Kluge, *Urgermanisch* (Paul's *Grdr.* 2) 7; Feist, *Indogermanen und Germanen* 75ff.; Karsten, *Die Germanen* (Paul's *Grdr.* 9) 197ff. (including loanwords); Much, *Deutsche Stammeskunde* (*Sammlung Göschen* 126) 43ff. (also including loanwords); and finally the

¹ *De l'unité italo-celtique*, *Norsk Tidsskrift for Sprogvidenskap* 3. 241ff. Cf. also *Une correspondance germano-celtique*, *Videnskapsselskapets Skrifter*, 2. *Hist.-Filos. Klasse* 1924 No. 8.

summary list by Hirt, *Etymologie der neuhochdeutschen Sprache* 107f. This latter however contains many doubtful comparisons which I have been forced to reject after more recent etymological authority. Still others of Hirt's equivalents are formally too inexact to be of significance.

The purpose in the following paper is to bring together as nearly as possible all that may be considered of significance as a peculiarly 'Germano-Celtic' vocabulary. It is not necessary that a group of cognates be found only in the two linguistic groups in order that it may indicate a community of culture: groups which are important only in Germanic and Celtic but which also have isolated cognates elsewhere or whose cognates in other linguistic groups deviate in meaning are likewise significant. Of more importance still in the indication of linguistic unity is agreement in the use of certain formations from roots found with different formations in cognate languages. Unfortunately for those who indulge in the Germano-Celtic theory, such formative agreements are rare and usually accidental.

The etymological basis of the present discussion is Walde-Pokorny, *Vergleichendes Wörterbuch der indogermanischen Sprachen*, to which reference is made for further inclusion of possible cognates and for root connections even where the view supported there has not been followed.² The 'vocabulary' itself has been classified in the hope of making the agreement more significant of cultural unity.

1. Political and legal vocabulary

OIr. *dliged* 'law, duty' (to *dligim* 'deserve', MW *dlyu*, *dleu*, Corn. *dyllly*, MBr. *dellit* 'debere'): Goth. *dulgs* 'debt' (1. 868).³ ChSl. *dlügŭ*, is Gmc. *lwd.*, cf. Berneker, 1. 244.

OIr. *luige*, W. *llu*, Br. *le* 'oath' (**lughyom*): Goth. *liuga* 'marriage', *liugan* 'marry', also apparently OHG *urliugi*, MLG *orloge*, *orloch*, OS *orlogi*, OFris. *orloch* 'war' as originally 'condition lacking oaths (of peace)', root **leugh-* (2. 415).

² Those references, included in parentheses at the end of the discussion, are made to volume and page with omission of the title. Likewise to avoid repetition the bare names of the authors are used for the following: Berneker, *Slavisches Etymologisches Wörterbuch*; Falk-Torp, *Norwegisch-Dänisches etymologisches Wörterbuch*; Fick, *Vergleichendes Wörterbuch der indogermanischen Sprachen* 3 (*Wortschatz der Germanischen Spracheinheit*); Pedersen, *Vergleichende Grammatik der keltischen Sprachen*; Stokes, *Urkeltscher Sprachschatz* (= Fick 2); Ernout-Meillet, *Dictionnaire étymologique de la langue latine*; Feist, *Etymologisches Wörterbuch der gotischen Sprache*; Much, *Deutsche Stammeskunde*; Schrader, *Reallexikon der indogermanischen Altertumskunde*.

³ Cf. above, note 2.

OIr. *orb(b)e*, *orpe* 'heir; inheritance', Gallic *Orbius* = Goth. *arbi*, OHG *arbi*, *erbi*, OE *ierfe*, *yrfe* 'inheritance' (hence Goth. *arbja*, etc. 'heir'), *yo*-stem formations from IE **orbho-* 'orphan(ed)' in Lat. *orbus* 'deprived', Grk. *ὀρφανός* 'orphaned', Arm. *orb*. 'orphan', Skt. *árbha-* 'small, weak; child' (1. 183).

Ir. *óeth* 'oath', OW *an-utonou*, MW *an-udon* 'false oath' (lit. 'un-oath') = Goth. *áiþs*, ON *eiðr*, OE *áp*, OHG *eid*, OS *ēth* 'oath', and formally equivalent to Grk. *oîros* 'fate', all probably derived from IE **ei-* 'go' (Grk. *εἶμι*, etc.), with semantic development through notion of entrance into a formal agreement (1. 103).

OIr. *recht*, W. *rhaith*, Br. *reiz* 'law' (cf. Gallic *Rectu-genus*), from PCelt. **rektu-* = ON *réttr* (gen. *réttar*) *u*-stem, but replaced in WGmc. by neuter of participle, OHG *reht*, etc., from root of Lat. *regō* 'rule', OIr. *rigim*, etc. (2. 364).

W. *rhydd* 'free' = Goth. *freis* (acc. *frijana*), OHG, OS *frī*, OE *fréo*, id. in ON *frjáls* (**frī-hals*), as contrasted with the formal cognate Skt. *priyá-*, Av. *frya-* 'dear, worthy', root **prēi-* 'love' (2. 87).

2. Warfare

OIr. *bágaim* 'fight, boast', *bág* 'battle', W. *beio* 'blame', *bai* 'fault', Gallic *Bagaudae* Gallic peasants who rebelled under Diocletian: OHG *bāgan*, *bāgēn* 'quarrel, fight', *bāga* 'fight', ON *bægjast* 'quarrel, strive', *bágr* 'contest', etc. root **bhāgh-* (2. 130).

Ir. *bodb* 'Goddess of battle in the form of a crow', Gallic *Boduo-genus*, *-gnatus*, *Ateboduuus*, etc. = ON *bqð* (*-var*), OE *beadu* 'battle', in proper names OHG *batu-* (cf. ON *Bqðvildr*, *Bqðmóðr*, etc. and the Gallic use, above); Germano-Celt. **bhodhwo-*, *-wā*, root connections obscure (2. 126; Falk-Torp 41).

OIr. *búaid* 'victory', W. *budd* 'benefit, profit' (but *buddig* 'victorious', *buddugo* 'be victorious'), OBr. *bud gl.* 'bradium', *budicaul* 'victorious': ON *býta* 'exchange, divide' (lwd. in NE *booty*, but this sense not found in ON), MLG *büte*, Du. *buit*, NHG *beute* (from LG) 'booty', Germano-Celt. **bhoudi-*, **bhūdi-* (2. 186). Otherwise Falk-Torp 122 for the Gmc. group.

Ir. *cacht*, W. *caeth* 'slave', Br. *kaez* 'unfortunate; dear', OCorn. *caid* = ON *hafr* 'prisoner', OE *hæft* 'captive, slave', OHG *haft* 'vincetus, captivus' = Lat. *captus* (participle) 'seized', also 'captive, prisoner', but the more technical term for the latter is *captivus* (1. 342.; Marstrander, Norsk Tidsskrift for Sprogvidenskap 3. 255).

Ir. *cath*, W. *cad* 'battle', Gallic *Catu-* (in *Catu-rīges*, etc.) = ON *Hqðr*

name of the blind brother and slayer of Baldr, also in *Hqð-broddr*, *Haðaland*, etc., OE *heapu-* in poetical compounds like *heapu-byrne* 'war-corslet', *heapu-helm* 'war-helm', etc., OHG *Hadu-* in proper names (*Hadu-brand*, *Hed-wig*, etc.); the Slavic has *r*-formations, ChSl. *kotora* 'battle', cf. MHG *hader* 'quarrel' (1. 339).

MIr. *cellach* 'contention, strife': ON *hildr* poet. 'battle' (common in proper names), OE *hild* 'war, battle', OHG *hiltia*, OS *hild* 'battle', from IE **gel-dh-*, probably from the root **gel-* 'strike' (1. 439).

Ir. *clíab* 'basket, wicker frame of a boat; the chest', originally perhaps 'shield (of wicker-work)', hence application to other articles of wicker and also, as shield, to the chest (cf. Grk. *θώραξ* 'breast-plate, cuirass' and 'chest'): ON *hlíf* 'shield, protection', ON *hlífa*, OHG *lîppen*, *lîben* 'protect', Goth. *hleibjan* 'take the part of', root connection? (Zupitza, BB 25. 94; Pedersen 1. 116; Feist 194f.).

MIr. *cuire* 'host, army', Gallic *Tri-*, *Petru-corii* 'Three-, Four-armies' (folk-names): Goth. *harjis*, ON *herr*, OE *here* 'army', OHG, OS *heri* 'army, host', but also Baltic: Lith. *kārias* 'army', Lett. *karš* 'war', OPruss. *kragis* (for *kargis*) 'army', cf. also Grk. *κοίρανος* 'leader, commander' (1. 462).

MIr. *drenn* 'battle', *drennach* 'quarrelsome', OBr. *ardrén* gl. 'prae-pugnus': OHG *zorn* 'anger, battle, strong displeasure', OE *torn* 'anger, grief, affliction', cf. OE *gár-torn* lit. 'spear-rage', OS *torn* 'grief, affliction'; in the more etymological meaning Du. *torn* 'rip' (= W. *darn* 'piece', Skt. *ḍīrṇa-* 'split, torn'), from the IE root **der-* 'tear, etc.' (1. 797ff.).

Gallic *drungos* 'hoc est globos hostium' (Vegetius, De re mil. 3. 16), Ir. *drong* 'troop' (NIr. 'multitude, folk, company, etc.', Dinneen), OBr. *drogn* gl. 'cetus' (coetus), PCelt. **drungo-*: (without nasalization) OHG *truht* 'troop', OE *dryht*, OS *druht*, ON *drótt* 'company, following', Goth. *driugan* *στρατεύεσθαι*, *ga-draúhts* *στρατιώτης*, etc. in opposition to meaning of cognates elsewhere, ChSl. *drugŭ* 'friend, other', Lith. *draũgas* 'companion' (1. 860; the Slavic group by Berneker 1. 230).

Ir. *dún* 'castrum, arx', W. *din* 'city', Gall. *-dūnum* (*Cambo-dūnum*, etc.) = ON *tún* 'hedged or fenced lot, enclosure' (NIcel. 'the enclosed premises near the dwellings, farmhouse and buildings'), OE *tún* id., later 'village' (NE *town*), OHG *zūn* 'enclosure, hedge' (NHG *zaun*), etc., root connection uncertain (1. 778).

Ir. *fichim* 'fight', *fecht* 'military expedition', OW *guith* in *or-guith-laun tal* gl. 'fronte duelli', OBr. *ueuith*, *uueith* in *Uueitnoc*, *Uuethien*, etc. (cf. in Gmc., ON *Vígfúss*, *Vígbrandr*, etc.): Goth. *weihan*, OE, OHG *wīgan*

'fight', ON *vega* (aor. pres.) 'kill, fight', etc. (cf. the rich Gmc. group by Fick 3. 408), but in Italic, Lat. *vincō* 'conquer', Osc. *vincter* 'convincitur', in Baltic, Lith. *veikti* 'make, work', Lett. *vēikt* 'perform'. The close semantic relation of the Celtic and Germanic words is evident. Arm. *veg* 'fight' is to be rejected on phonetic grounds. (1. 232; Marstrander 256.)

OIr. *gái* 'spear', Gallo-Grk. *γαῖσον*, Gallo-Lat. *gaesum*; OIr. *fo-gae* = W. *gw-aew* 'javelin': OHG *gēr*, OE *gār*, ON *geirr* 'dart, spear', in opposition to Grk. *χαῖος* 'shepherd's crook' (: Skt. *heṣas-* 'Geschoss' ? meaning and etymology wholly uncertain, cf. Böht.-Roth, s.v.; Wackernagel, Altind. Gr. 1. 44). IE **ghaisos*, without root connection (1. 528f.).

Ir. *gíall*, W. *gwystl*, OCor. *guistel* 'hostage', Br. *gouestl* 'vow, promise': OHG *gīsal*, NHG *geisel*, OE *gīsel*, ON *gīsl* 'hostage', perhaps from the root in OIr. *gell-*, *gill-* 'pledge, promise' (1. 554).

W. *llost* 'spear', Br. *lost* 'point, end', Ir. *loss* 'end, tail': ON *ljóstr* 'fish-spear', *ljósta* 'strike', root connection doubtful (2. 408).

OIr. *néit* 'battle' (< **nenti*, **nanti* ?): OE *nóp* 'temerity, boldness', OE *néþan*, OHG *ginenden*, Goth. *ana-nanþjan* 'dare', etc., root connection uncertain (2. 317; Falk-Torp 762f.).

OIr. *níth* 'battle, distress', Gall. *Nitio-broges*, *Nitio-genna*: Goth. *neip* 'φθόνος', ON *níð* 'libel' (legal term), OHG *nīd* 'battle-rage, hate, envy', OE *nīþ* 'envy, enmity', OS *nīth* 'envy, hate, emulation', etc., Celtic and Gmc. **nūt-* (2. 336; Kretschmer, KZ 38. 117).

? MIr. *óech* 'enemy': Goth. *fáih* 'deceit', OHG *fēhida* 'hate, enmity', OE *fáh*, *fág* 'guilty, outlawed, hostile', NE *foe*, etc., also Skt. *piçuna-* 'slandorous, treacherous, evil' (but cf. 2. 10).

Ir. *tailm* (gen. *telma*), Br. *talm* 'sling', W. *telm* 'snare, trap': ON, Nicel. *þjálmi* 'sort of snare' (Marstrander 256, but Ir. *tailm*, etc. to Grk. *τελαμών* 'thong for carrying armor', from IE **tel-* 'lift' in Lat. *tollo*, etc., without ON *þjálmi*, in Walde 1. 739).

MIr. *slactha* 'struck' (pple.), *slacc* 'sword': Goth. *slahan*, ON *slá*, OE *sléan*, OHG *slahan* 'strike, slay', etc. (2. 706f.).

OIr. *trén* 'brave, strong' (**treks-no-*), comp., sup. *tressa*, *tressam*, OIr. *tress* (*trekso-*) 'battle': ON *þrekr*, *þrek* 'strength, bravery', OE *þrece* 'force, oppression', OS *wāpan-threki* 'ability with arms', etc. If here at all, the Grk. *τράγη·πεπηγυῖα* Hesych. is isolated, and deviates in sense. (1. 755f.; Pedersen 1. 296.)

W. *ym-wan* 'joust, tilt', *ymwanwr* 'combatant', in simplex *gwanu* 'pierce, thrust, stab', Corn. *gwane* 'perforare', etc.: Goth. *wunds*, OHG, OE *wund* 'wounded', ON *und*, OE *wund*, OHG *wunda* 'wound', etc. (1. 212).

3. Cultural and technical vocabulary, dwelling, etc.

W. *cae* 'enclosure, field, fence, hedge', Corn. *cē* 'hedge', OBr. *caiou* 'munimenta', MBr. *quae*, Br. *kae* 'fence, hedge, quay': OHG *hag*, OE *haga* 'enclosure', ON *hagi* 'pasture', OHG *hegga*, *hecka*, OE *hecg* 'hedge'; perhaps also, but divergent in form, Skt. *kakṣā-* 'circular wall, enclosure, girdle, border of a garment' (1. 337).

Ir. *coire*, W. *pair*, Corn. *pēr* 'caldron, boiler': ON *hverr* 'caldron, pot', from IE **q^wer-*; and with *n*-extensions also in Celtic and Germanic:

MIr. *cern* 'dish; a measure': ON *hverna* 'pan, basin', Icel. *hvern*, *hvörn* 'two boat-shaped bones in the fish's brain', Goth. *hvatrnei* 'κρῆνιον' (1. 518).

W. *cy-warch* 'hemp, flax, tow', Br. *koarc'h* 'hemp', OBr. *coarcholion* gl. 'canabina' (-*ch* < **gn-*): OHG *ā-wirihhi*, *ā-wurihhi*, *werik*, NHG *werg* 'tow', probably from the root of OHG *wirkan*, Goth. *waúrckjan*, etc., IE **werǵ-* (1. 291; Pedersen 1. 159).

? OIr. *delg* 'thorn, fibula', Corn. *delc* 'monile': ON *dálkr* 'fibula', OE *dalc* 'clasp, brooch'; possibly also, but with deviating sense, Lith. *dilgė*, *dilgėlė* 'nettle', *dilgūs* 'pricking, burning' (1. 865f.).

MIr. *drab* 'draff', NIr. *drabh*, *dramh* 'refuse' (as of corn, etc.): ON *draf* 'draff, husks', ME *draf*, NE *draff* 'refuse, dregs, lees', esp. 'refuse from brewing', Dan. *drav*, Sw. *draf*, OHG (pl.) *trebir*, NHG *treber*, etc. (Russ. dial. *drob*, and *dreba* 'sediment, yeast, distiller's wash, draff' probably LG loanwords, cf. Berneker 1. 224f.), from the root of Goth. *drobjan*, OHG *truoben* 'trouble, confound', OE *dréfan* 'disturb, agitate', IE **dh(e)rābh-* (1. 856). Other root connection by Falk-Torp 153f.

W. *edau*, *edaf* 'thread, yarn', MW *adaued* 'thread', OW *etem* gl. 'instita', Gael. *aitheamh* 'fathom': OHG *fadam*, *fadum* 'thread', OE *fæpm* 'embrace, length of the extended arms' (NE *fathom*), ON *faðmr* 'embrace, fathom', from the root in Grk. *περάννυμι* 'spread out', Lat. *patēre* 'be spread, stand open' (2. 18). The semantic development from 'embrace' to 'fathom', thence to 'a measure of thread (the length of the outstretched arms)' and 'thread (in general)', is peculiar to Germanic and Celtic, and remarkable also is the use of an *m*-suffix in both groups.

OIr. *gabul*, NIr. *gabhal* 'fork, fork of a tree, etc.', W. *gafl* 'fork', Br. *gavl*, *gaol* 'forking': OHG *gabala* 'fork' (probably originally as an agricultural instrument, cf. *mist-gabala*), MHG *gabel(e)*, NHG *gabel*, OE *geafol* 'fork', etc., Germano-Celtic **ghabhol-* (1. 533).

MIr. *gann* (< **gandhn-*) 'vessel, jug, pitcher': Gmc. **gandhnā* in ON *kanna*, OE *canne*, OHG *channa* 'can'; late Lat. *canna* as Gmc. lwd. (1. 535; Falk-Torp, 491).

Ir. *gruth* 'curds': ME *crudes*, *curdes*, NE *curds*, from the root in OE *crúdan* 'press, drive' (NE *crowd*), MDu. *kruden*, MG *kroten* 'press', IE **greut-* (1.650; Stokes 119; Zupitza, Germ. Gutt. 212).

OIr. *lár*, W. *llawr* 'solum, pavementum': ON *flórr* 'floor in a cow stall', OE *flór* 'floor', MLG *vlōr* 'floor, meadow', *r*-formations to IE **p(e)lā-* 'flat, broad, etc.' (2. 62).

OIr. *luib*, NIr. *luibh* 'herb, vegetable': ON *lyf* 'herb, plant with healing or supernatural power', OE *lybb* 'medecine, drug, simple; poison', OHG *luppi* 'herb, poison, witchcraft', Goth. *lubja-leisei* 'φαρμακεία', IE **leubh-*, further connections uncertain (2. 418; Pedersen 1. 116).

OIr. *nasc* 'ring', *nascim* 'fasten': OHG *nusca*, OS *nuscia* 'clasp', from **n₂d-sk-*, to IE **ned-* 'tie' (2. 328).

OW *ocet*, NW *oged*, Corn. *ocet*, Br. *oged* 'harrow': OHG *egida*, MHG *eg(e)de*, OE *egede* id. (Gmc. **agida*); related but with old geminated interior consonant Lat. *occa* 'harrow' (cf. Ernout-Meillet 662, not **okitā* > **ot(i)kā-* as Hirt, IF 37. 230), and with other formation Lith. *akė* 'čios', OPruss. *aketes*, Lett. *ecēšas* (1. 31f.).

W. *rhŷch* 'trench, furrow; rut, groove', OBr. *rec* gl. 'sulio', Ir. dat. pl. compound *etrigib*, Gallo-Rom. *rica*: OE *furh*, OHG *furuh*, *furh*, NE *furrow*, NHG *furche*, ON *for* 'drain, ditch' = (formally) Lat. *porca* 'ridge between furrows', Fest. also 'drain-ditch in a field' (nearer the original sense), but replaced as the common word for 'furrow' by *sulcus* in Latin. (2. 47; Pedersen 1. 122; Ernout-Meillet 753.)

OIr. *rucht* 'tunica': ON *rokkr*, OHG *rocko* 'distaff', ON *rokkr*, OE *rocc*, OHG *roc* 'tunic, jerkin, upper garment', IE **rug-* (2. 374). Further attempt at root connection by Marstrander, IF 22. 335 (as from IE **wer-g-*, extension of **wer-* 'turn' ??).

MIr. *síthlad* 'sieving', NIr. *síothlán* 'strainer, filter, colander', W. *hidl* 'strainer, sieve, colander' = ON *sáld* 'sieve', Goth. **sēdl* represented by the loanwords Carel. *siekla*, Finn. *seula* id., from IE **sē-tlo-*, contrasted with **sēi-to-* in Lith. *sė'tas*, ChSl. *sito*, Serb. *sīto* 'sieve', from the root in Grk. *σῖθω*, *σῖθέω*, Lith. *sijóti*, ChSl. *sějati* 'sift' (2. 459).

W. *to* 'roof' = ON *þak*, OE *þæc*, OHG *dah*, id., from the root *(s)*teg-* 'cover', in Lat. *tego*, etc.; contrast Lat. *tectum* 'roof' (2. 621; Much 47).

Ir. *treb* 'dwelling place', W. *tref* 'home, homestead, hamlet, town', OBr. *treb* 'village', OIr. *atrebaim* 'dwell, possess', W. *athref* 'domain, mansion', Gall. *Atrebat*: OE *-þrep*, *þorp*, *þrop* 'hamlet, village, homestead', OFris. *therp*, OS *thorp*, OHG *dorf* 'village', Goth. *þaúrþ* 'tilled land, field'; also in Italic and Baltic: Lat. *trabēs* 'beam', *taberna* 'booth', Osc. *trībúm* 'domum, aedificium', *trībarakavúm* 'aedificare', Umbr.

tremnu 'tabernaculo', etc., Lith. *trobd* 'house, building', Lett. *trāba* 'building' (1. 757f.). The sense 'dwell, dwelling' (> 'village' and 'cultivated land') is peculiar to Germanic and Celtic. The other cognates are essentially 'beam' > 'structure (of beams)'.

Celto-Iber. *viriae* 'sort of arm-ornament' (Pliny 33. 40), cf. OIr. *fiar* 'oblique', W. *gwyr* 'oblique, crooked', Br. *gwar* 'bent': OE *wīr* 'wire', esp. 'ornament of gold or silver wire', ON *vírr* 'wire', *víra-verki* 'filigree', from IE **wei-* 'bend, turn' (1. 226).

4. Nature, earth, land, plant and animal life, etc.

Gall. *Aballo*, *Aballava*, *Aballavensis*; Ir. *aball*, W. *afall* 'apple-tree', Ir. *ubull*, W. *afal*, Corn., Br. *aval* 'apple': OHG *apful*, OE *æppel*, ON *epli*, Crim.-Goth. *apel*, Celtic and Gmc. **ab-(a)la-*, **ab-lu-*, probably also Italic **abel-* in Lat. *Abella*, Osc. *Abellanút* 'Abellano', but opposed to **āb(ō)l-* in Lith. *óbuolas*, Lett. *ābuals*, ChSl. *ablŭko*, *jablŭko*, etc. (1. 50f.).

? MIr. *aig*, W. *ia* 'ice', etc.: ON *jaki* 'broken ice', Swiss *jäch*, *gicht* (*ge-jicht*) 'hoar-frost', OE *gicel* 'icicle', etc., perhaps also in Baltic, cf. Lith. *ižà* 'ice-floe', Lett. *īze*, *aīza* 'crack in the ice' (1. 206).

MIr. *áirne* (**ag-rīnya*) 'sloe', W. *aeron* 'fruits, berries', *eirin* 'plums', MBr. *irin*, Br. *hirin* 'sloe': Goth. *akran* 'fruit of the field', ON *akarn*, OE *æcern*, etc. 'wild fruit, acorn', from IE **ag-* beside **ōg-* in Lith. *úoga* 'berry, cherry', Lett. *uōga* 'berry', ChSl. *agoda*, *jagoda* 'fruit', etc. (1. 173; Zupitza, Germ. Gutt. 213).

NIr. *ala* 'trout', cf. *aladh*, MIr. *alad* 'speckled, piebald': OHG *alant*, *alunt* 'Leuciscus idus' (MHG, NHG *alant*) ON *glun* 'sort of fish, (mackerel?)', possibly as 'gay-colored' from 'burnt', from the root **al-* 'burn' in Lat. *adolēre* (1. 88; Marstrander, Zt. f. celt. Phil. 7. 372f.).

Celt. *Ἀρκύνια* (*Hercynia*, *Orcynia*, etc.): OHG *Virgunnia* cf. Goth. *faīrguni* 'mountains', OE *firgen-* (cpds.) 'mountain-', perhaps as 'oak-woods', from the root of Lat. *quercus* 'oak', OHG *forha* 'fir', etc. (2. 47f. with lit.).

W. *bera* 'pyramid, heap' = ON *bjarg* 'rock, precipice', OE *beorg*, OHG *berg* 'mountain', but also = Arm. *berj* 'height', from IE **bherǵh-*, in Skt. *bṛhant-* 'great, high', etc. (2. 173).

Ir. *bláth*, W. *blawd* 'bloom, blossom', OCorn. *blodon*: OHG *bluot* 'blossom', OE *bléd* 'shoot, branch, flower, fruit', with other formation Lat. *flōs*, from IE **bhel-* (**bhlō-*) in Grk. *φύλλον*, Lat. *folium* 'leaf', etc. (2. 177; Marstrander, Norsk Tidssk. f. Sprog. 3. 257).

MIr. *brí* (acc. *brig*) 'hill', W. *bry* 'high', W., Corn., Br. *bre* (fem.) 'hill', Gall. *-briga* (in *Litano-briga*, etc.) = Goth. *baúrgs*, OHG *burg* 'city, forti-

fied place', IE **bhrǵh-*, from the root **bherǵh-* (above under W. *bera* 'heap').

W. *brwyn* 'rushes', OCorn. *brunnen* gl. 'juncus, scirpus', Br. *broenn* 'du jone' (**brugno-*):OE *brogena* gl. 'frondium', *gibrogne* 'virgultum', Norw. dial. *brogne*, *brogn* 'twig, stalk of clover', root connection ? (2. 208; Pedersen 1. 103).

MIr. *búal* 'stream, water', *búar* 'diarrhoea' (**bhog-lā*, **bhogrā*):ON *bekkr*, OE *bece*, OS *beki*, OHG *bah* 'brook', IE **bhog-* 'flowing water' (2. 187).

? MIr. *coirce*, W. *ceirch*, Br. *kerc'h* 'oats', from **kork-yo-*, perhaps: OGutn. *hagre*, Norw., Sw. dial. *hagre* 'oats', transformed by presence of the group ON *hafri*, etc. (1. 348; Zupitza, Germ. Gutt. 32).

OW *coit*, W. *coed*, OCorn. *cuit*, Br. *koad* 'woods'; Gall. *καϊτόβριξ*, *Cēto-briga*, etc.:Goth. *háipi* 'field, heath', ON *heiþr* 'heath, fell', OE *hæþ* 'heath, desert', IE **kaito-* (1. 328).

NIr. *cuinneog* 'Angelica silvestris' = ON *hwōnn* id. from **kwondhnā*, and with *r*-suffix Dan., Faroe. *qvander*:Scotch-Gael. *contran* id., but Lat. *combrētum* 'an aromatic plant', Lith. *šveñdrai* 'Typhalatifolia' (1. 472).

? OIr. *dind* 'hill, height':ON *tindr* 'spike, mountain peak' (esp. in local names), OE *tind*, MHG *zint* 'tine, prong', OHG *zinna* 'pinnacle', cf. also Phryg. *Δινδύμος* name of a mountain. Root connection uncertain (1. 120; Stokes 151).

Ir. *duine*, W. *dyn*, Corn., Br. *den* 'man' (as 'mortal'):Goth. *diwans* 'mortal', OHG *touwen*, OS *dōian*, ON *deyja* 'die', etc. (1. 835).

OIr. *eo*, W. *yw(en)*, OCorn. *hiwin*, Br. *ivin* 'yew-tree':OHG *īwa*, OE *īw*, ON *ýr* id., but with other application Lith. *ievà*, *jievà*, Lett. *iēva* 'bird-cherry', Russ. *iva*, etc. 'willow', Grk. *οἴη*, *ῥα*, *ῥη* 'mountain ash' (1. 165, Fick 3. 28).

Ir. *eo* (gen. *iach*), W., Br. *eog*, Corn. *ehoc* 'salmon' (Lat. *esox* 'sort of fish' is Celtic lwd.):OHG *asco*, MHG *asche*, NHG *äsche* 'grayling, *Thymallus vulgaris*' (1. 162; Hirt, IF 22, 69f.).

OIr. *fid* (gen. *feda*) 'tree, wood, woods', W. *gwydd*, Br. *gwez* 'trees, woods', Gall. *Uidu-casses*:ON *viðr*, OE *widu* 'tree, wood, woods', OHG *witu*, *wito* 'wood', IE **widhu-*, root connection uncertain (1. 314).

W. *gro*, OCorn. *grou*, Br. *groan*, *grouan* 'gravel' (**ghrōwis*):ON *grjón* 'groats', MHG *grien* 'gravelly sand', MLG *grēn* 'grain of sand' (**ghrēuno-*), perhaps from a root **ghrēu-* 'rub', in Grk. (aor. subj.) *χράσῃ* 'scrape, graze, wound slightly' (1. 648).

Ir. *gúal* 'coal, carbon':ON *kol* (pl.), OE *col*, OHG *kolo*, etc. 'coal', possibly with *l*-suffix from a root **geu-*, with *r*-suffix in Arm. *krak* 'fire' (1. 563; Falk-Torp 591, but with other root connection).

OIr. *land* 'open space', MW *llan* 'area', Corn. *lan*, Br. *lann* 'heath, steppe': Goth., ON, OE *land*, OHG *lant* 'land', etc. but also in Balto-Slavic: OPruss. *lindan* 'valley', Russ. *ljada* 'newly broken land', Boh. *lada* 'fallow ground', etc. (2. 438f.; Berneker 1. 705).

W. *llau* 'lice' (OW *leu-esicc* 'louse-eaten'), Corn. *low*, Br. *laou* id.: ON, OE *lús*, OHG *lūs* 'louse' (2. 443).

? Ir. *ruaim* 'water alder, alder tree': OHG *ruzbaum*, *ruost*, MHG, NHG *rüster* 'elm', IE **reus-* (2. 361; Stokes 234).

Ir. *lind* (*u*-stem) 'liquid', NIr. *lionn* 'ale', W. *llyn* 'liquid, drink': Icel. *lind* 'spring', with ablaut MHG *lünde* 'wave', here also probably OIr. *lind* (*s*-stem) 'water, pool, lake', W. *llyn*, Br. *lenn* 'pond' (2. 438, but with unnecessary separation of the latter Celtic group; cf. Pedersen 1. 37; Stokes 248, but with other connection outside Celtic).

? Ir. *macha* 'plain' < **makosyā* ? : ON *mör* 'moor' < **mākos* (2. 226; Falk-Torp 726).

? OIr. *mag* 'plain, open field', W. *ma* 'place', Gall. (*Arganto*-) *magus*: NHG *Mach-land* name of the alluvial plain in upper eastern Austria (Much 47).

Ir. *marc*, W. *march*, Br. *marc'h*, Gallic *μάρκαν* (acc. sg., Pausanias) 'horse' = OHG *marah*, OE *meaṛh*, ON *marr* id. (fem. formations in Gmc.: OHG *meriha*, OE *miere*, ON *merr*, etc.), Celtic and Germanic **marko-* (2. 235).

OIr. *roen* 'road, mountain range', Br. *run* 'hill': ON *rein* 'strip of land' (as e.g. *skógar-rein*, *mark-rein*, etc.), OHG *reini-* (in cpds.), NHG *rain* 'ridge of earth as boundary mark, strip of grass between fields', all perhaps from the notion of '(boundary) mark', from a root **rei-* 'scratch' (2. 343; Pedersen 1. 58).

Ir. *úr* 'earth, clay': ON *aurr* 'gravel, loam', OE *éar* 'humus' (Fieck 3. 6; Falk-Torp 36).

? Gall. *Vesontio* 'Besançon', perhaps contains the name of the 'aurochs': OHG *wisant*, *wisunt*, NHG *wisent*, OE *wesend*, *weosend*, ON *visundr*, possibly as 'horned' to Skt. *viṣāṇa-* 'horn' (1. 315; Kluge, Urgermanisch 6).

5. Motion, locomotion, transportation, etc.

MIr. *bocaim* 'shake, swing', verbal noun *bocad*, NIr. *bogadh* 'a softening, stirring, shaking': OE *cwacian* 'tremble', *cweccan* 'turn, shake, vibrate' (1. 671).

Gall. *briva* 'bridge' (in *Brīva Isarae* 'pont de l'Oise', *Brivo-duron* 'forteresse du pont', *Brivate* 'endroit où il y a un pont', *Samaro-briva* 'bridge over the Samara', Celt. **brēwā*): ON *brú* 'bridge', *bryggja* 'pier, landing

stage, gangway', OE *brycg*, OS *bruggia*, OHG *brucka* 'bridge', etc., IE **bhrēu-*, found also in Slavic but in the more original sense 'beam': ChSl. *brǫvŭno*, *brǫvŭno*, *brǫvno* 'dokós', Russ. *brevnó*, Boh. *břevno*, Pol. *bierwiono*, *bierzwiono* 'beam', also in the sense 'foot-bridge' in older Boh. *břev*, Bulg. *brǫv*, SCr. *břv*, Slov. *brv* (but mostly also 'beam, etc.') (2. 207; Berneker 1. 92; Stokes 184). However the transition 'beam' > 'beam thrown across water, (narrow) bridge' is probably an independent development in Slavic. Moreover the original sense of 'beam' is entirely lost in Germanic and Celtic, as the meanings of Swiss *brügi* 'hay-loft, wooden floor in a stable' and like NHG dialect words are probably secondary. The root means 'bridge' in Germanic.

W. *chwerfu* 'whirl', *chwerfan* 'whorl, pulley': Goth. *bi-swaírban*, *af-swaírban* 'wipe off', ON *sverfa* 'file off', Norw. *sverva* 'whirl', ON *svarfa* 'sweep, swerve', OE *sweorfan* 'rub, file', OHG *swerban*, *swerpan* 'lead to and fro, whirl', etc. (obscure Grk. *σῆρφος* 'sweepings'), IE **swerbh-* (2. 529f.).

Ir. *cuan* 'harbor' = ON *hofn*, OE *hæfn*, NE *haven*, Du. *haven*, MHG *hapn*, *habene* id., originally as 'shelter, container (for vessels)', cf. OHG *havan*, NHG *hafen* 'port', from the root **qap-* 'hold' in Lat. *capitō*, etc. (1. 342f.; Pedersen 1. 94).

W. *cwyddo*, *dy-gwyddo*, Br. *koeza* 'fall': ON *hitta* 'hit upon, find' (*hitta* *á*, *í*, etc.), Dan. *hitte*, Sw. *hitta* (NE *hit* from Scand.), IE **keid-* (1. 364).

W. *chwyfio* 'moye', *chwyf* 'motion' (also Ir. *siubhal* 'walking' ??): ON *svimma*, OE, OHG *swimman* 'swim', etc.; Lith. *sùmdyti* 'incite' (<'set in motion'?) is uncertain (2. 524).

Ir. *fēn* (**weġh-no*) 'wagon' in ablaut relation: OHG *wagan*, OE *wægn*, ON *vagn* 'wagon', cf. Skt. *vāhana-* 'carrying; vessel, boat', from IE **weġh-* 'move, go' (1. 250).

W. *gyrru* 'drive, send': OE *cierran* 'turn, go, proceed', MHG *kerren* 'turn', also of 'driving' cattle, *daʒ vihe kerren*, like W. *gyrru* (1. 609, but root connection doubtful).

W. *he-brwng* 'bring, lead, conduct', *hebryngiad* 'leader', OCorn. *he-brenchiāt* id., MCorn. *hem-bronk* 'will lead', MBr. *ham-brouc*, Br. *ambroug* 'accompany, escort': Goth. *briggan*, OE, OHG *bringan* 'bring', IE **bhrenk-*, **bhronk-* (2. 204; Stokes 186, etc.).

Ir. *rá-* 'row', *imm-rerae* 'profectus est', inf. *imram*; *rám* 'oar': ON *róa* (cf. pret. *rere*: Ir. *-rerae*), OE *rówan*, etc. 'row', from IE **(e)rē-*, also in Lat. *rēmus* 'oar' (but no verbal stem in Italic), with other formation Grk. *ῥῆμας*, Skt. *aritra-*, Lith. *irklas* 'oar', Lith. *irti* 'row', etc. (1. 143f.; Marstrand 257).

OIr. *riadaim* 'ride (in vehicle)', W. *rhwyddau* 'facilitate, speed', *rhwydd* 'free, expeditious, prosperous, etc.' = ON *riða* 'swing, ride', OE *riðan*, OHG *ritan*, etc. 'ride'; OHG *reita* 'wagon', etc. (: Gall. *rēda* 'four-wheeled wagon'). Here also Goth. *ga-ráip̃s* 'arranged', ON *g-reiðr* 'ready, free', OE (*ge*)*ræde* 'ready, swift, simple', etc. (: W. *rhwydd*), Germanic and Celtic **reidh-*, not found elsewhere (2. 348f., but Lith. *raidīt* 'urge, dispatch' is to be rejected, cf. Mühlenbach-Endzelin, Lett.-Deutsches Wtb. 3. 470).

Gall. *ritu-* 'ford' (in *Ritu-magus*, *Augusto-ritum*), Ir. *rith* (in *Humar-rith*), OW *rit*, W. *rhyd*, Corn. *rit* id. = OE *ford*, OHG *furt* id., also Av. *paratuš*, *pəšuš* 'passage, bridge, (ford?)', Lat. *portus* 'house-door, harbor', from IE **pr-tu-* 'passage', from **per-* 'go through, over' (2. 40). The specialization to 'passage through water' is typically Germanic and Celtic.

Ir. *sēt*, W. *hynt*, Br. *hent* 'way, road': OE *stēð* 'journey, way, course; time', OHG *sind* 'way, direction', ON *sinni* 'walk, way, fellowship', *sinn* 'time', Goth. *sinþa* 'time', etc., from the root of OHG *sinnan* 'go, journey', Goth. etc. (caus.) *sandjan* 'send', Av. *hant-* 'reach', Arm. *ənt'aç* 'way', *ənt'anam* 'go, journey' (2. 496).

? NIr. *snighim* 'creep, crawl': OE *sntican* id., Dan. *snige* 'sneak', ON *sntikja*, Sw. *snika* 'hanker for', further connections uncertain (2. 698; Falk-Torp 1095).

6. The body and bodily functions, etc.

OIr. *at-baill* 'dies', W. *aballu* 'perish, fail', Corn. *bal* 'pestis': OE *cvelan* 'die', OHG, OS *quelan* 'suffer torment', ON *kvəl* 'pain, torment', OE *cwalu* 'violent death', from the root **g^wel-* 'prick, pricking pain', but with development to 'die, death' also sporadically in Baltic: OPruss. *gallan* (acc.), *golis* 'death', cf. Lith. *Giltinė* 'goddess of death', but *gėlti* 'sting, cause pain' (1. 690).

Ir. *bolg* 'sack, belly', W. *bol*, *bola*, *boly* 'belly, paunch, bag', cf. Gall. *bulgas* 'sacculos scorteos': ON *belgr* 'pelt used as a bag, bellows', OE *belg* 'bag, bellows, belly', OS, OHG *balg* 'bellows, leather bag', Goth. *balgs* 'ἀσκός', etc., from the root in Ir. *bolgaim*, OHG *belgan* 'swell up', ON *bolginn* 'swollen', IE **bhelgh-* 'swell', also sporadically in Indo-Iranian and Balto-Slavic but mostly as 'pillow, lump', etc. (2. 182f.). The original sense 'swell' and the wide spread use as 'bag' > 'belly' is peculiar to Celtic and Germanic.

OIr. *bot*, NIr. *bod* 'penis' (< **buzdhos-*): OE *peord* 'vulva', probably from a root **b(h)u-* 'puff up, blow' (2. 117; Stokes 180).

MIr. *bruasach* 'strong-breasted', derivative of **bhreus-to-* = OS *briost*, OE *bréost*, ON *brjóst* 'breast'; cf. with zero grade Goth. *brusts*, OHG *brust*, from the IE root **bhreus-*, also in names of parts of the body in Slavic: Russ. *brjucho* 'belly', etc. (2. 197f.).

W. *bys*, OCorn. *bis*, *bes*, Br. *biz* 'finger', cf. MIr. *biss ega* 'icicle': ON *kvistr* 'twig', IE **g^wis-tis* (1. 694).

OIr. *caech* 'one-eyed', OCorn. *cuic* 'loscus vel monophthalmus', W. cpd. *coeg-ddall* 'half-blind' (but *coeg* 'empty, vain') = Goth. *háih*s 'one-eyed', but Lat. *caecus* 'blind' (1. 328). 'One-eyed' in Lat. is *luscus*. NIr. *caoch* 'blind' is doubtless due to Latin influence.

W. *caill*, Br. *kell* 'testicle': OE *sceallan*, OFris. *skal* 'testicles', root connection uncertain (2. 592-3 under **(s)qel-* 'cut, split').

Ir. *ceinn* 'scale', W. *cen* 'skin, peels, scales': ON *hinna* 'film', from **gend-n-*, probably to the root in Br. *scant*, etc., below (2. 563).

Ir. *dúal* 'strand, lock (of hair), etc.' (*dual cinn* 'tresses of the head') from **doklo-*: Goth. *tagl* 'a hair', ON *tagl* 'hair of a horse's tail', OE *tægl* 'tail', etc., *l*-formations to the root in Skt. *daṣā-* 'fringe', MHG *zāch* 'wick', etc. (1. 785).

OIr. *étan* 'forehead' (**ant-ono-*?): ON *enni*, OHG *andi*, *endi* id. (**anti-os*); cf. Lat. *antiae* 'hair on the forehead, forelock', Grk. *ἀντίος* 'opposite' (from the root of Grk. *ἀνρί*, etc. 1. 67).

? Ir. *glacc*, NIr. *glac* 'hand', *glaccaim* 'clasp': OE *clyccean* 'grasp, seize', ME *clēche* 'claw' (1. 613; Zupitza, KZ 36. 236).

? OW *gumbelauc* 'womb' (? cf. Rev. celt. 2. 141), Br. *gwamm* 'woman' (jocular): Goth. *wamba*, ON *vǫmb*, etc. 'womb, belly' (1. 191).

OIr. *idu*, gen. *idan* 'travail': Goth. *filan* 'ώδινειν' (2. 70).

OIr. *inathar* 'guts' (*in-* for **en-* by infl. of prep. *i n-* 'in'), Corn. *enederen* 'exstum' < **en-ōtro-*; cf. with similar formation but prefix *inn(a)* OHG *innādiri* 'guts', OLFrancon. *innēthron*, etc., and (with **ō*-grade as in Ir., and prefix *in-* but with different suffix) OHG *inuodili* 'guts', cpds. of IE **ēter* in Grk. *ἥρῶπ* 'heart', etc. (1. 117).

OCorn. *lagat*, MCorn. *lagas*, Br. *lagad* 'eye', probably also W. *llygad* 'eye' (for *y* cf. Osthoff, IF 5. 313 or Pedersen 2. 36): OHG *luogēn* 'peer, spy' (NHG *lügen*); OS *lōcōn*, OE *lōcian*, NE *look* (**lāk-nā-*), other connections uncertain (2. 381).

? OIr. *mlicht*, *blicht*, W. *blith* 'milk' (**mlǵtis*): ON *mjaltr* 'giving milk' (**melǵ-to-*), cf. also Ir. *melg* 'milk': Goth. *miluks*, ON *mjolk*, OE *meolc*, OHG *miluk* with unexplained insertion-vowel *-u-*, from the root **m^lǵ-* in Lat. *mulgeo*, Grk. *ἀμέλω*, Ir. *bligim*, OHG *melchan* 'milk' (2. 293f.). The root gives the regular substantives for 'milk' only in Celtic and Germanic.

MIr., NIr., *mong*, W. *mwng* 'mane': ON *makki* 'upper part of a horse's neck', Dan. *manke* 'mane', *g*-formation to root in ON *mōn*, OE *manu* 'mane', Skt. *manyā-* 'back of neck', etc. (2. 305).

? Ir. *remor* 'thick, fat', NIr. *reamhar* 'stout, thick, fat', W. *rhef* 'big, thick' (*[p]remro-). MHG *frum* 'capable, good' (2. 371; Pedersen 1. 167).

Br. *skant* 'scales', OBr. *an-scantocion* gl. 'insquamosus' (*sqnto-): ON *skinn* 'skin' (*sgento-), OHG *schinten*, NHG *schinden* 'flay', etc., connections outside Germanic and Celtic doubtful (2. 563).

OIr. *seiche* 'hide, skin', NIr. *sethe*: ON *sigg* 'hard skin, callus', from the root *se- 'cut', in Lat. *secare*, etc. (2. 475; Vendryes, WuS 244).

Br. *staot*, MBr. *staut* 'urine' (*stalto-), possibly also Ir. *stalladh* 'warming drink' (Dinneen), *stalda* 'stale or warm drink' (O'Reilly): MLG, NHG *stallen*, NE *stale* 'urinate' of horses, but in Swiss also of men (restriction is probably due to sb. *stall*), possibly from the root in Grk. *σταλάσσω* 'drip'. The Celtic words are not necessarily borrowed from Germanic as in Walde 2. 642; Henry 252.

OIr. *trosce* 'leprosy' (*truds-ko-): Goth. *pruts-fill*, OE *prúst-fell* id., root connection ? (1. 762).

7. Mental and emotional activity, vocal utterance, etc.

OIr. *ágor*, *águr* 'I fear' (perhaps old perf., cf. Brugmann, Grdr. II 3. 484) verbal noun *áigthiu*: Goth. *og*, *ogum* (pret. pres.) 'fear', *ogjan* 'frighten', ON *óask* 'fear', Goth. *agis*, OE *ege*, ON *agi*, OHG *egī* 'fear', etc., also in Grk. *ἄχος* 'pain, distress', *ἄχομαι* 'grieve, lament', but divergent in sense. The Germanic and Celtic show unity of ablaut and meaning. (1. 40; Pedersen 2. 454f.)

OIr. *áil* 'insult': Goth. *agls* 'shameful', *aglipa*, *aglo* 'affliction', OE *eg(e)le* 'loathsome', etc., IE *agh-, possibly also in Skt. *agha-*, Av. *aγa-* 'evil' (1.41).

MIr. *caiss*, W. *cas*, Br. *kas* 'hate' (from *kəd-s-i-): Goth. *hatis*, ON *hatr*, OE *hete* id. (*kəd-es-), with IE *ā* (and deviating sense) Grk. *κῆδος*, Dor. *kādos* 'trouble, anxiety, sorrow', Av. *sādra-* 'woe, sorrow', etc. (1. 340).

OIr. *fo-bothaim* 'frighten': OS *under-badon* id. (1. iii).

W. *iaith*, Br. *iez* 'language': OHG *jiht* 'assertion, confession', *jehan* 'say, speak, confess', OS *gehan* 'confess', probably also in Lat. *iocus* 'jest', Umbr. *iuka* 'preces' (1. 204f.).

OIr. *labraid*, *labrathar* 'speak', W. *llefaru* id., etc., perhaps: LG *flappen* 'gossip, chat; clap, slap', NE *flap* (2. 93).

? OIr. *glicc*, NIr. *glic* 'wise': MHG *kluoc* 'fine, dainty; cunning, wise', NHG *kluog*, MLG *klōk* (1. 613; Zupitza, KZ 36. 236).

OIr. *gu-* 'choose', in *dígu* 'bad choice, the worst', *ad-gúisiu* 'wish', etc., *for-gu* 'selection', etc. (cf. Pedersen 2. 549f. for forms): ON *kjósa*, OE *céosan* 'choose', Goth. *us-kiusan* id. (but *kiusan* 'test, try'), OHG, OS *kiosan* 'choose, taste', all with the semantic shift 'taste' > 'choose', as opposed to the original sense in Skt. *juṣ-*, Grk. *γεβομαι*, Lat. *gusto* 'taste, enjoy' (1. 568f.).

? OIr. *óbar*, *úabar* 'arrogance', W. *ofer* 'vain', Br. *euver* 'fade, amer; paresseux': Goth. *abrs* 'strong', *abraba* 'very', *biabrjan* 'fall into amazement' (1. 177; Pedersen 1. 49).

Ir. *rád-* 'speak' (lsg. *no-rádim*, *no-ráidíu*), *im-rádaím* 'ponder, think', MW *ad-rawd* 'tell', W. *am-rawdd* 'discourse', OW *amraud* 'mens', etc.: Goth. *rodjan*, ON *ræða* 'speak', IE **rādh-*. (Here also perhaps Av. *rāḍaiti* 'prepares', Skt. *rādh-* 'achieve, prepare', Lith. *ródyti* 'show', Slavic *raditi* 'be anxious', but distinct from other groups given in Walde 1. 74f. Cf. Falk-Torp 886; Fick 3. 347; Pedersen 2. 591f.)

OIr. *rím*, Ir. *áram* (**ad-rīmā*), W. *rhif* 'number', Ir. *do-rímu* 'count': OE *rím* 'number', ON *rím* 'computation', OHG *rīm* 'account, series, number', etc., IE **rīm-*, from the root **arēi-* with other formation in Grk. *ἀριθμός* 'number', Lat. *rītus* 'rite, custom', etc. (1. 75).

OBr. (pl.) *rogedou* 'orgies', W. *rhewydd* 'wantonness, lust': Goth. (*faihu-*) *friks* '(money-) greedy', ON *frekr* 'greedy', OE *frec* 'greedy, bold', OHG, NHG *frech*, etc.; perhaps also Slavic in Pol. *pragnąć* 'be thirsty, desire vehemently' (?? 2. 88; Brückner, Słow. Etym. Języka Polskiego 434).

OIr. *scél* 'tale', W. *chwedl* 'saying, fable': ON *skáld* 'poet', OHG *sa-gēn* 'say', etc. (2. 479, Pedersen 1. 77).

8. Sense perception

W. *chweg* 'sweet, pleasant', OCorn. *whék*; Br. *c'houek* 'sweet', W. *chwaeth* 'savour, taste': OHG *swehhan* 'smell, stink', OE *swecc* 'taste, flavor, savor', *gesweccan* 'smell', etc. (2. 521).

MIr. *derg* 'red': OE *deorc*, NE *dark*; MHG *terken* 'make dirty', etc. (1. 855).

MIr. *drésacht* 'squeaking noise', Gall.-Lat. *drenso* 'cry' (of swans): LG *drunsan* 'bellow', Du. *drenzeln* 'whine', s-extensions of the root in Skt. *draṇati* 'sounds' (1. 861).

Ir. *glass*, W., Br. *glas* 'green, blue, grey': Germano-Lat. *glēsum* 'amber', ON *gler* 'glass', OE *glær* 'amber', *glæs*, OHG *glas*, etc. 'glass', named from the color ('bluish green'), from the same root as the following:

Ir. *gluss* 'light, brightness': ON *glys* 'finery', MHG *glosten*, *glosen* 'glow, shine', *gloste* 'glow', from IE **ghel-* 'shine' (1. 626f.).

Ir. *tart* 'thirst': ON *þorsti*, OE *þurst*, OHG *durst* 'thirst', cf. with other formation Skt. *tarṣa-*, Av. *taršna-* id., from the root **ters-* 'dry' (1. 737f.)

9. Family, etc.

Ir. *fine* 'family' (**venyā*), *fin-galach* 'parricidalis', *coibnes* (**con-venestu*) 'relationship', OBr. *coguenou* 'of the same race', Br. *gouenn* 'race, descent', W. *Gwynedd* 'North Wales': Gmc. **weni-s* in ON *vinr*, OS, OHG *wini*, OFris., OE *wine* 'friend', from the root in Lat. *venus* 'love', Skt. *vanati* 'wishes, loves', etc. (1. 259).

? Ir. *icht* 'tribe, progeny': ON *átt* 'family' (broad sense) = Goth. *áihts*, OE *éht*, OHG *ēht* 'property', from the root of Goth. *áigan* 'own', Skt. *īṣṭe* 'owns', IE **eik-* (1. 105, but rejecting Ir. *icht*; cf. Falk-Torp 1415; Feist 15).

OIr. (*ingen*) *maccdach* 'young full-grown (girl)', OCor. *mahtheid* 'virgo', MCor. *maghteth*, *magthyth* id., Br. *matez* 'servant-girl', from an abstract Celt. **magot-actā*, derived from **magot-is* in Goth. *magaps* 'young woman', OE *mægeþ*, OS *magath*, OHG *magad*, etc., all feminine formations from IE **maghu-* in Ogham *magu*, OIr. *maug*, *mug* 'slave', Cor. *maw*, Br. *mao* 'lad, servant', W. *meu-dwy* 'hermit' (lit. 'servant of God'): Goth. *magus* 'boy', ON *mōgr* 'son, youth', OE *magu* 'child, son, man', etc., outside of Germanic and Celtic perhaps in the derivative Av. *mayava-* 'unmarried' (2. 228).

OIr. *muin* 'love, protection', *muinter* 'legitimate wife' (**moniterā*): OE *mund*, OHG *munt* 'protection' (NHG *mündel*), ON *mundr* 'sum of money paid for the wife' (*kaupa mey mundi*). Vendryes, Zt. f. celt. Phil. 9. 295f.; Feist, Indog. u. Germ. 75. (Otherwise Walde 2. 272 considering OE *mund*, OHG *munt* 'protection' = OE *mund*, OHG *munt* 'hand', but without the Celtic words.)

10. Religion, superstition, etc.

MIr. *aur-ddrach* (posttonic for **-druag*) 'ghost': ON *draugr* id., cf. Skt. *drōgha-*, *drōha* 'injury, treachery, perfidy', Av. *draoga-* 'lie, deceit', root **dreugh-* in OHG *triogan*, etc. 'deceive' (1. 874).

W. *bwg* 'ghost, hobgoblin', *bwgan* 'bogey, ghost', MIr. *bocánach*, NIr. *bocán* 'goblin': Fris. *bökk*, Swiss *bögg*, Swab. *bockelman*, NE *bogey*, *bogle* (cf. W. *bwgwl* 'fright' ?), etc. (2. 189f.; Zupitza, KZ 36. 235).

MW *hut*, W. *hud*, MCor. *huss*, Br. *hud* 'magic', OCor. *hudol* 'magician' (**soitos*): ON *seiðr* 'spell, charm, enchantment' (hence *síða*, *seið* 'work a charm through *seiðr*'), perhaps (attested?) Lith. *saitas* 'inter-

pretation of signs', *saisti* 'interpret signs', other connections obscure (2. 509).

Gall. *nemeto-* (in *vernemetis* 'fanum ingens', *Vernemetum* city of Great Britain, *δρυ-νέμετον* Strabo, etc.), Ir. *nemed* 'sanctuary', NIr. *neim-headh* 'sacred or privileged place or thing': OS *nimidas* pl. 'sacra silvarum' (Feist, Indog. u. Germ. 76).

OIr. *rún*, W. *rhin* 'secret': Goth. *rūna* id., OE *rún* 'whisper, secret, a rune', OS *rūna* id., ON *rún* 'secret, rune', etc., perhaps from the root of Skt. *rauti* 'howls, roars', etc. (2. 350).

11. Miscellaneous

? OIr. *ad-andai* 'kindles, begins': Goth. *tandjan* (**t-and-*) 'kindle' (Thurneysen, IFAnz. 33. 32; Marstrander, Norsk Tidssk. f. Sprog. 3. 257).

Gall. *ambi-*, W. *am-* (*em-*, *ym-* by umlaut), Br. *am-*, *em-*, Ir. *imb-*, *imm-* 'about' = OHG, OS *umbi*, ON *umb*, OE *ymb*, etc., from IE **mbhi-*, whereas **ambhi-* in Grk. *ἀμφι*, Lat. *amb-*, etc., Umbr. *amb-*, Osc. *am-*, Alb. *mbi*, *mbe*; Skt. *abhi*, OPers. *abiy*, Av. *aibī*, *aiwi* probably represent IE **obhi* or **ebhi*, not **mbhi* (1. 54f.).

Ir. *benn* 'horn, tip', W. *ban(n)* 'prominence, peak', MBr. *ban* 'éminence, saillie, hauteur': WFlem. *pint* 'point', MLG *pint* 'penis', MHG *pinz* 'subula', OE *pinn*, NE *pin*, etc., IE **bend-* (2. 109f.).

OIr. *bronnaim* (**bhrusnāmi*) 'injure, damage', MBr. *bráim*, W. *briwo* 'break to pieces', W. *briw* 'fragment', etc.: OE *briesan*, *brýsan* 'break to pieces', NE *bruise*; OHG *brōsma*, MHG *brōsem(e)*, NHG *brosame* 'crumb', IE **bhreus-* (2. 198f.).

OIr. *cétne*, *cét-* 'first', W. *cynt* 'first, earlier', adv. 'formerly, lately', *cyn* 'before, pre-', Gall. *Cintus*, *Cintugnātos* 'Primigenitus': Burgund. *hendinos* 'king', and probably Goth. *hindumists* 'hindmost', etc., possibly from the root in Skt. *kanīna-* 'young', etc. (1. 398).

Ir. *clé*, W. *cledd*, Corn. *cladh*, Br. *kleiz* 'left': Goth. *hleiduma* 'left' (superl. formation), probably through 'unlucky' (cf. Lat. *clīvius* 'unlucky' of portents), from an original notion 'slanting, steep' from the root **klei-* 'lean' (1. 490).

Ir. *crúach* 'heap, stack, rick', W. *crug* 'heap, barrow, stack', Corn. *cruc* 'hill', OBr. *cruc* 'acervam', NBr. *krug* 'mound': ON *hrúga* 'heap', *hraukr* 'small stack', OE *hréac* 'heap, stack, rick', etc. (cf. Falk-Torp 866), root connection uncertain (1. 477; 2. 573).

OIr. *cucht* 'shape, form, color' (*u < o*): ON *hótttr*, NÍcel. *hátttr* 'habit, mode, manner; metre', IE **koktu-s* (1. 456; Zupitza, Germ. Gutt. 207).

Ir. *dess*, NIr. *deas* 'right, right hand', W. *deheu*, Br. *dehou* id., Gall. in *Dexsiva dea*, with *-wo-* suffix as in Gmc.: Goth. *taihswa*, OHG *zesō* 'right', Goth. *taihswō*, OHG *zesawa* 'right hand', etc., but with other suffixes Skt. *dakṣiṇa-*, ChSl. *desnŭ*, Grk. *δεξιτερός*, Lat. *dexter*, etc. (1. 784; Marstrander, loc. cit.).

? Scotch-Gael. *drip* 'haste, bustle': Goth. *dreiban*, ON *drífa*, etc. 'drive, thrust' (1. 872).

OIr. *drucht* (**dhrup-tu-*), NIr. *drúcht* 'dew, a drop': ON *dropi*, OE *dropa*, OHG *tropfo* 'drop', etc. (1. 873; Thurneysen, Hdb. 138).

? Ir. *drúth* 'fool' (NIr. especially 'foolish girl, harlot' by confusion with Ir. *drúth* 'whore'), W. *drud* 'reckless, bold': ON *trúðr* ' juggler', OE *trúp* 'trumpet player, actor, buffoon' (1. 795, but with doubtful root connection).

? Ir. *drúth* 'whore', Corn. *drúth* id., W. *drud* 'dear, precious': OE (OS) *drút* 'friend, beloved one', OHG *trút*, NHG *traut* 'dear, beloved', MHG *trút* m. also 'lover, husband' (Falk-Torp 1285). Or are the Celtic words identical with *drúth* 'fool' (above), or loan-words from Romance, OFr. *drue*? (Cf. Pedersen 1. 496; Thurneysen, Keltoromanisches 56f.)

OIr. *éim*, NIr. *eimh* 'quick, prompt' (**peimi*): ON *fimr* 'nimble, agile', *fimi* 'dexterity' (in cpds. *vápn-fimi*, *orð-fimi*, etc.), other connections uncertain (2. 11).

? OIr. *indí frisbrudi* gl. 'renuentis', *fris-brúdémor* gl. 'aporiāmur', inf. *frithbruduth* gl. 'respuere': ON *brjóta*, OE *bréotan* 'break', etc. (2. 196; Pedersen 2. 479).

OIr. *glenim*, W. *glynaf* 'stick, adhere' = OHG *klenan* 'stick, smear': ON *klína* 'smear', cf. Grk. *γλίνη* 'glutinous substance, gum', Russ.-ChSl. *glénŭ* 'slime', etc., *n*-formations from the base **gelei-* (1. 619).

W. *gwyllt* 'wild, savage, mad': Goth. *wilpeis*, OE *wilde*, OHG *wildi*, etc. 'wild', root connection uncertain (1. 297; Falk-Torp 1377f.).

OIr. *legaim*, NIr. *leagaim* 'melt, dissolve, thaw', *fo-llega* '(the ink) runs out', *do-lega* 'destroys', etc., W. *llaith*, Br. *leiz* 'damp', W. *dadlraith* 'melt, dissolve': ON *lekr* 'leaky', *leka* 'leak', OE *leccan* 'wet, moisten', MHG *lecken* 'moisten', etc. (2. 422f.; Pedersen 2. 562).

MIr. *lian* 'soft': ON *linr* 'soft, gentle, weak', MHG *līn* 'tepid, exhausted, bad', Bavar. *len* 'soft, exhausted, unsalted', ON *lina* 'mitigate', root connection uncertain (2. 387).

? OIr. *lith* 'festival', W. *llid* 'anger, feast', Br. *lid* 'ceremony', Gall. *Litu-genus*: Goth. *leipus* 'wine', OHG *līd*, ON *līð* 'strong drink'. (But rejected 2. 392. Cf. Pedersen 1. 132f.)

OIr. *lorg* gl. 'clava', NIr. *lorg* 'club, staff, etc.; leg, shank, shin', MIr. *lurga* 'shin-bone', OCorn. *lorch* 'baculus', Br. *lorc'hennou* 'les bras d'une charrette':ON *lurkr* 'cudgel', ODan. *lyrk* id. (2. 443).

? OIr. *loun* 'Reisekost', OIr. *loan*, *loon*, OBr. *lon* (lwd.?) gl. 'adepts': OHG *floum* 'cream, raw leaf-lard', LG *flōm*, from IE **plou-* (2. 101).

OIr. *mis(s)-* negative and pejorative prefix:ON, OE, OS *mis-*, OHG *missa-*, *missi-*, NHG *miss-*, root connection doubtful (2. 248).

Ir. *múg-* verbal root in OIr. *formúigthe*, *formúichthai* gl. 'abscondita', *rumúgsat* gl. 'suffoderunt, . . .', etc. (cf. KZ 24. 210f.):OHG *mūhhari*, *mūhho*, *mūhheo* 'highwayman', *muhhēn* 'lie in ambush for', NHG *meuchler* 'assassin', etc., ME *micher* 'thief', NE *mitch* (2. 255). For Lat. *muger* cf. Ernout-Meillet 604.

OIr. *olc*, *elc* 'bad':ON *illr* 'evil, bad', root connection uncertain (1. 159; Falk-Torp 461).

Ir. *reb*, NIr. *reabh* 'trick, feat', Ir. *rebrad*, NIr. *reabhradh* 'act of playing', Ir. *rebaigim* 'play':MHG *reben* 'move, stir', NHG (Bavar.) *rebisch* 'gay', Swiss *räbeln* 'make noise', MLG *reven* 'talk nonsense', etc., IE **rebh-* (2. 370).

W. *rhwydd* 'free, ready, prosperous, etc.':Goth. *garáips* 'in order', OE (ge)*ráde* 'ready', MHG *gereit*, OFris. *rēde*, etc. id., from the root **reidh-* in Ir. *riadaim*, ON *riða* 'ride', etc. (2. 348).

Ir. *scáth*, W. (cpd.) *cy-sgod*, Br. *skeud* 'shadow':Goth. *skadus*, OE *sceadu*, OHG *scato* id., elsewhere only cognate is Grk. *σκότος* 'darkness', IE **skōt-* (2. 600).

OIr. *seng* 'slender':MHG *swanc* 'swinging, pliant, slender', NHG *schwank* 'pliant, thin, slender', etc., from the root of OHG *swenken* 'let swing', Skt. *svaj-* 'embrace' (2. 526).

? W. *serth* 'obscene', *serthedd* 'profanity, ribaldry':ON *serða* 'stuprare', MHG *serten* 'futuere', root connection uncertain (2. 500).

OIr., NIr. *slat* (**slat-nā*), W. *llath*, Br. *laz* 'rod, stick':OHG *latta*, ME *lathe* (**laþþ-*); OE *lætt* (**latto*), etc. 'lath', IE *(s)*lat-*, further connections uncertain (2. 382).

Ir. *sliss* 'chip, splinter', *slissiu* 'chip, lath' (**splid-ti-*):ON *flis* 'splinter', MLG, LG *vlise* 'flat square stone' (**plid-to*), from a root *(s)*plei-* 'split' (2. 684).

Ir. *snaidim* 'chip, cut', *snass* 'cut, blow', W. *naddu* 'chip, cut', W. *neddyf*, Br. (n)*eze* 'adze':MHG *snete*, *snetle* 'stripe, scar', Swiss *schnätzen* 'chip', root **snadh-* (2. 694).

OIr. *sriab* 'stripe':MLG *strīpe*, MHG *strīfe*, NHG *streifen*, Norw. *strīpa* id. (2. 638).

? Ir. *tamon*, NIr. *tamhan* 'stump, trunk of a tree':OHG, MHG *stam*,

NHG *stamm* 'stem, stock, etc.', ON *stafn* 'stem, prow, etc.', IE **stam-* (2. 625; Fick 3. 484).

OIr. *techtaim* 'own', Br. *tizout* 'reach, overtake': ON *þiggja* 'accept, receive', OSw. *þiggja* 'get', OE *þicgan*, OS *thiggian* 'take, receive, accept', probably also OS *thiggian* 'implore', OHG *dicken* 'ask for', Dan. *tigge*, Sw. *tigga* 'beg'. The root probably meant originally 'ask (for)', whence secondarily 'get, own'. Lith. *tenkù, tèkti* 'fall to one's share, come into one's possession; suffice, etc.' is probably to be rejected (1. 715).

W. *teg* 'fair, beautiful', *annheg* 'ugly' = OIr. *éi-tig* id.: ON *þágr* 'agreeable, acceptable, obedient', from the root in Ir. *techtaim* (above).

OIr. *tiug*, W., Corn. *tew*, Br. *teo* 'thick': ON *þykkir, þjokkr* 'thick', OE *þicce*, OHG *dicchi* 'thick, dense', OS *thikki* 'id., often', root connection uncertain (1. 718).

OIr. *tuigiur* 'cover' = ON *þekja*, OE *þeccan*, OHG *decchen* from IE **toǵeyō* (iter.) replacing IE **tegō* (2. 621).

? MIr. *uag* 'hole', NIr. *uaigh* 'grave, tomb, den, cave': Goth. *auḡo*, ON *auga*, etc. 'eye'. Entirely uncertain (Zupitza, Germ. Gutt. 73f, Stokes, KZ 35. 151f.).

While loanwords are of no significance in establishing a linguistic unity, they cannot be ignored as one of the most tangible proofs available of a close cultural contact throughout a considerable period of time. Indeed many of the words listed above as cognate have often been regarded as loanwords by different scholars. However I believe we should consider words to be cognate unless there is evidence (phonetic or cultural) for their being borrowed. Many Celtists have already been too prone to maintain the opposite—that all agreements in vocabulary which might be explained as borrowings must be so explained, although there was nothing in the way of their being cognate. This was the great mistake of H. d'Arbois de Jubainville in his presentation of Germano-Celtic vocabulary (*Les premiers habitants de l'Europe* 1. 335–67), which, in spite of that, remains the most exhaustive discussion of the cultural relations of Celt and German as revealed by the common vocabulary. Therefore the following list of certain or at least probable borrowings presents a meager appearance beside the formidable number given by him.

1. Celtic loanwords in Germanic

Gmc. **ambahtaz* in OHG *ambaht*, Goth. *andbahts* (with change to native prefix) 'servant', from Celt. **ambaktos*, whence Gallo-Lat. *ambactus*

'servant', W. *amaeth* 'plowman', lit. 'one sent about', from the root **aġ-* 'drive' (1. 35).

ON *api*, *apa*, OHG *affo*, *affa*, OE *apa*, OS *apo* 'ape' probably from a Celt. **āβānos* corrected for *āβānas* · Κελτοὶ τοὺς κερκοπιθήκους Hesych. ORuss. *opica*, OBoh. *opice*, etc. are Gmc. loanwords. (1. 51f.; Schrader 1. 17.)

Goth. *brunjo*, OHG *brunna*, etc. 'breastplate, byrnie', from the Celtic word for 'breast': OIr. *bruinne*, W. *bron*, Br. *bronn* (2. 197).

Goth. *eisarn*, ON *ísarn*, OE *íren*, OHG *īsan*, *īran* from Celt. **īsarno-*, cf. Gall. *Isarnus*, OBrit. *Iserninus* (proper names), OIr. *iarnn*, W. *haearn*, OCorn. *hoern* 'iron', etc. The origin of the Celtic word is uncertain; possibly to Skt. *ayas* 'metal', Lat. *aes*, Goth. *áiz* 'bronze', or else of Illyrian origin. (1. 4; Pokorny, KZ 46. 292ff.)

OHG *leder*, OE *leþer*, ON *leðr* 'leather', from a Celt. **leþro-*: OIr. *lethar*, W. *lledr*, Br. *lezh*, id., probably from IE **ple-tro-* to Lat. *pellis* 'hide', etc. (2. 428; Pedersen 2. 45).

Goth. *lekeis*, OHG *lāchi*, OE *læce* 'physician', from Celt. **le[p]agi-* in OIr. *līaig* id., possibly as 'conjurer' from the root in Skt. *lapati* 'whisper, chat, complain', etc. (2. 429; Pedersen 1. 311).

OE *léad*, MHG, NHG *lot* 'lead', Gmc. **lauda*, from Celt. **loudo-*, beside **loudyo-* > MIr. *luaide* id., probably from IE **plou-d-*, from **pleu-* 'flow' (2. 442; Schrader 1. 151).

? Dan., Sw. *lomme*, Fris. *lomm* 'pocket', cf. OIr. *lumman* 'covering'. Relation obscure. (2. 418; Falk-Torp s.v.)

Goth. *reiks* 'ruler', ON *ríkr* 'mighty', OHG *rihhi*, etc., Gmc. *rīk-* from Celt. **rīg-* in Ir. *rí* (gen. *ríg*), Gall. *-rīx* (*Vercingetorix*, etc.), from IE **rēg-* in Lat. *rēx*, Skt. *rāj-*, etc. (2. 365).

? Goth. *siponeis* 'pupil, disciple', probably as 'follower' from the Gallic root **sep-* 'follow' = Ir. *sechur*, Lat. *sequor*, etc., IE **seqw-* (cf. Much, PBB 17. 33).

2. Germanic loanwords in Celtic

OIr. *bocc*, NIr. *boc*, W. *bwch*, Corn. *boch*, Br. *bouc'h* 'he-goat', from a Gmc. **bukka-*: ON *bukkr*, OE *buc(c)*, MHG *boc*, etc. (2. 189; Zupitza, KZ 36. 235).

Gallo-Lat. *brāca*, from Gmc. **brōk-* in OHG *bruoh*, OE *bróc*, ON *brækr* 'breeches', etc.; probably so-called from the part of the body covered 'the rump': Lat. *suffrāgines* 'back part of an animal' (2. 192).

OIr. *séol* 'piece of cloth, sail', W. *hwyl* 'sail' from Gmc. **segla-* in ON, OE *segl*, OHG *segal* 'sail', probably from IE **seq-ló-*, from the root **seq-* 'cut' (2. 475).

MISCELLANEA

THE EARLIEST SHIFT OF THE SPANISH -RA VERB FORM FROM THE INDICATIVE FUNCTION TO THE SUBJUNCTIVE: 1000-1300 A.D.

In classic Latin the usual function of forms in -ram (*amaveram, videram, dixeram*) was to denote an action prior to another past action expressed or implied in the context.¹ The forms were also used in the apodosis of contrary to fact conditions, cf. Seneca, de Ira 2.33.6: *perierat alter filius, si carnifici conviva non placuisset*. Examples begin with Plautus and 'though never very common . . . are found all through the classical period'.²

For comparison of the use in Early Spanish, the texts examined³ may be divided into three groups: antique documents;⁴ epics and short 13th-century monuments;⁵ and five lengthy 13th-century poems in clerical Alexandrine verse.⁶

¹ For the use in OLat. merely as a past tense, cf. Bennett, *Syntax of Early Latin* 1.50.

² H. C. Nutting, *The Latin Conditional Sentence* 89 (Univ. Calif. Publ. in Class. Phil. 8.1), who ascribes the use to a desire 'for emphasis or overstatement.'

³ Leavitt O. Wright, *The -ra Verb Form in Spain* 21 (Univ. Calif. Publ. in Mod. Phil. 15.1).

⁴ *Documentos Lingüísticos de España, I: Reino de Castilla*, ed. Ramón Menéndez Pidal, Centro de Estudios Históricos, Madrid 1919; *Fuero de Avilés*, ed. A. Fernández-Guerra y Orbe, Madrid 1865; *Fuero de Guadalajara*, ed. H. Keniston, Princeton Univ. Press 1924; *Fuero de Zamora*, ed. A. Castro, Centro de Est. Hist. 1916; *Primera Crónica General*, ed. Ramón Menéndez Pidal, Nueva Bibl. de Aut. Esp. 5, Madrid 1906.

⁵ *Cantar de Mio Cid*, ed. R. Menéndez Pidal, Madrid 1911; *Roncesvalles, Fragmento de*, ed. R. Menéndez Pidal, *Rev. de Filol. Esp.* IV, 1917; *Auto de los Reyes Magos, Disputa del Alma y Cuerpo, Razón de Amor, Elena y María, and Tres Reyes de Oriente*: reprinted together in *Poema de Mio Cid y Otros Monumentos*, Editorial Calleja, Madrid 1919.

⁶ G. de Berceo, *La Vida de Santo Domingo de Silos*, ed. J. D. Fitz-Gerald, Paris 1904; *Libro de Apolonio*, ed. C. Carroll Marden, Baltimore-Paris 1917; *La Vida de Santa María Egipcíaca*, ed. R. Foulché-Delbosc, Barcelona 1907; *Libro de Alixandre*, ed. Alfred Morel-Fatio, Dresden 1906; *Poema de Fernán González*, ed. C. Carroll Marden, Baltimore 1904.

This is a type of literature which, according to Menéndez Pidal's *Poesía Juglaresca y Juglares* 357, was written in a language readily understood by the common people, a poetry of a less polished type. If this be true, we can consider our verb count, which is based on a study of these five 13th-century clerical poems, as a good indication of the verb trend of the common speech of the period.

The antique documents contain, in over 2,000 lines, 448 occurrences of the *-ra* form, of which only 34 are not employed with indicative force. Of the 34, all have a pluperfect tense value with the exception of 2 which occur in the apodosis function of the imperfect subjunctive. The ratio between *-ra* indicative occurrences and total *-ra* forms is .92; and a comparison of the number of subjunctive forms in *-ra* with those in *-se* gives a ratio of .033.

The epics and other short monuments contain, in about 5,000 lines, 33 *-ra* verb forms. Only 8 are in the subjunctive, as compared with 163 *-se* forms, giving a ratio of .76 for the *-ra* indicative to the *-ra* total, and one of .049 for the *-ra* to *-se* subjunctive forms.

The five clerical poems show a steadily decreasing ratio between the *-ra* indicative and total *-ra* forms⁷ and a constantly increasing ratio of the *-ra* forms in comparison with the *-se* subjunctive forms.⁸ These figures indicate a trend in verb usage which continues thereafter until, as the *-ra* form steadily abandons its characteristically indicative function, it eventually invades all the functions hitherto performed by the *-se* form.

After the early shift of the *-ra* form from the pluperfect function to a pluperfect apodosis function in a contrary to fact condition (such as we saw in the quotation from Seneca and which prevailed throughout the two first groups above), there began a shift from the pluperfect apodosis to the imperfect apodosis. In the *Apolonio*, 2 of the 3 examples of the imperfect apodosis function occur with the auxiliary (*oujera*) plus the past participle. This is possibly a reinforcing of the prevalent tense value of the form in a compound construction, constituting one of the first steps in the shift from a pluperfect to an imperfect function of the simple form in *-ra*. So in the *Alixandre*, 17 of the 20 occurrences of the *-ra* form in the imperfect apodosis (as compared to 50 in the pluperfect) are examples of the auxiliary plus past participle. The next step was for the form in *-ra* to pass over from the apodosis to the protasis, first in the pluperfect and then in the imperfect. Examples of that shift begin to appear in this group.

The function of the *-se* form which was encroached upon latest by that in *-ra* was its employment in a subordinate non-conditional clause, first of the noun type, and then of the adjective and adverb types. In the third group occurs the first discovered break from the hith-

⁷ Berceo .87; *Apolonio* .82; *Sta. María Egip.* .77; *Alixandre* .51; *Fernán González* .50.

⁸ Berceo .013; *Apolonio* .029; *Sta. María Egip.* .078; *Alixandre* .12; *Fernán González* .28.

erto exclusive employment of the *-ra* form in conditions, but this non-conditional subordinate subjunctive function of the *-ra* form was not generally accepted in Spanish for two centuries, during which time its encroachment on the apodosis and protasis functions of the forms in *-ría* and *-se* was thoroughly established.⁹

Examples of the successive functions fulfilled by the form in *-ra* in Spanish between 1000 and 1300 A.D. follow:

-RA Indicative Pluperfect:

Aquelos que gelos *dieran* non gelo auien logrado. (Cid 2452)
Ca assil *dieran* la fe e gelo auien iurado. (Cid 163)

-RA Indicative Non-pluperfect Past:

Alço la mano, ala barba se tomo:
Grado a Christus, que del mundo es señor,
quando veo lo que auia sabor,
que *lidiaran* comigo en campo myos yernos amos ados;
Mandados buenos yran dellos a Carrion,
Commo son ondrados y aver vos grant pro. (Cid 2479)

-RA Subjunctive Pluperfect Apodosis:

Violos venir y oyo una razon,
Ellos nol vien ni dend sabien raçion;
Sabet bien que si ellos le viessen, non *escapara* de muert.
(Cid 2774)

-RA Subjunctive Pluperfect Protasis:

mas qujsieron morir que seyer desleales,
bien andante fuera Poro sy todos *fuera* atales.
(Alixandre 2061d)

The tense of *pudiera* is disputable; it seems most likely to be parallel to *era* in value, and a part of what they replied, and accordingly an imperfect.

Elçides, sy non oujes a España pasado,
maguer era valient non serie tan contado,
Bacus, sy non oujes el su lugar lexado,
non *oujera* el regno India ganado.
(Alixandre 241d)

This condition contrary to fact has a compound construction in the protasis and the apodosis, the auxiliary verb being in the imperfect.

⁹ For details concerning these ratios in Modern Spanish, cf. Wright 160.

This seems to be a definite sign of the breaking away from an exclusively pluperfect function for the *-ra* verb form, the past participle being added to a *-ra* form to reinforce its pluperfect value.

-RA Subjunctive Imperfect Protasis:

Oujera Menelao buen derecho tomado,
Que lo *oujera* muerto o lo *oujera* llevado,
mas acorriole otri, sacogelo de mano,
tornaron lo a Troya mal trecho y lasrado.
(Alixandre, 475b)

-RA Subjunctive Imperfect Subordinate, in noun clause:

(He was attacking Thebes:)
Allegaron a la cerca a todo lur pesar,
Socauaron el muro pora ellos plegar;
Ya temblaua la tapia, quería se acostar,
Querría lo que *fiziera* Thebas auer por far.
(Alixandre 213d)

LEAVITT O. WRIGHT

AGAIN WELSH *dig*, SLAVIC *dikŭ*, ETC.

I am indebted to Prof. Senn for his correction (LANG. 9.206 ff.) of the meaning quoted for Lith. *dỹkas* in my note (LANG. 8.297) on the etymology of Welsh *dig* 'anger; angry', etc., which I there connected with Russ. *dikij* 'wild, savage, ferocious; desert; odd; strange, etc.', Pol. *dziki* 'wild, raw, rough, untame', etc., Lith. *dỹkas* 'empty, idle, vain, useless' according to Lalis, but according to Kurschat: 1) bei Schleicher müssig, unbeschäftigt.—2) muthwillig, übermüthig. My error as to the present current literary usage was due to the latter definition. According to Senn (and the new Wörterbuch der litauischen Schriftsprache) Lith. *dỹkas* means only: 1. müssig, untätig. 2. leer, öde. In his survey of the definitions in the various lexica, Senn does not mention Kurschat.

If, as Senn would maintain, the original meaning of the group in Baltic is 'empty, idle', and in Slavic 'undomesticated, non-cultivated', then the semantic connection with the British words in question is rendered considerably more complicated. But I am not convinced of this. No less a Slavist than Josef Zubatý has already commented on the semasiology of the Balto-Slavic group: 'Zügellosigkeit, Ungebundenheit scheint den balt.-slav. Bedeutungen zu Grunde zu liegen' (Arch. f. sl. Phil. 16. 390). The same view of the semantic development is apparently held by Berneker (Sl. etym. Wtb. 1. 199f.) when he doubt-

fully suggests that the words may be derived from an extension of the root seen in Skt. *dī'yati* 'flies', Grk. *δίω* 'put to flight, frighten', *διεμαι* 'speed, hasten away' (cf. Walde-Pokorny 1. 775 with the comment on this root connection 'ganz fraglich'). Slavic **dikŭ*, moreover, in all the dialects where it occurs (Russ., Ukrain., Pol., Upper Sorb.), is used in the broadest sense of wild.¹ I cannot conclude, as Senn does, from the examples of the use of the Russian word given in Dal' that 'the original meaning of the Slavic word, at least as far back as we can trace it, was "wild" only in the sense of "undomesticated" (of animals); "growing wild, non-cultivated" (of plants).' Nor that 'the other meanings that appear with this word in modern Russian (namely: "savage, ferocious, odd, strange, unsociable, shy") are but later additions, and some of them undoubtedly come from Western Europe, especially from French as a translation of *sauvage*.'² And I have searched as vainly for the proof of this in the Dictionary of the Russian Academy, where quotations in all senses are from literature of the same general period, as, for example, 'wild, savage' of people from Karamzin, 'wild' of place and 'wild, furious' of a current or stream from Žukovskij, and also 'wild' of laughter from Gogol'. It is true that the meanings which Senn holds to be original are given first, but that means nothing, since neither dictionary is historical. As to the late citation in Miklosich (Lex. palaeoslov. 161) *dikaja bylŭ* 'wild plant', it indicates in no way that the original Slavic meaning was 'non-cultivated'. The same deduction might be made with infinitely greater justification for the Germanic group to which NE *wild* belongs, from the fact that Goth. *wilpeis* happens to occur twice with *alewabagms* rendering *ἀγριέλαιος* 'wild olive tree', and the only other time as a gloss to *miliþ haiþiwisk* 'μέλι ἄγριον'. Yet compare OIcel. *villr* only 'bewildered, erring, astray', or, from the Celtic cognates, Welsh *gwyllt* 'wild, savage, mad; rapid, fast, furious; passionate, excitable' (according to Spurrell, Welsh-Engl. Dict.³ s.v.).³

¹ I am indebted to Prof. George V. Bobrinskoy for his feeling as to the current colloquial use of the Russian word.

² It is evident that the translation of French *sauvage* could have had no influence on Russian *dikij* in this direction, since the French word in ordinary usage preserves to a great extent its etymological meaning (vulg. Lat. *salvāticus*, for Lat. *silvāticus*). The Dictionnaire Général gives only as figurative the uses: 1) Qui fuit le commerce des hommes. 2) Intraitable. Cf. also the Dict. de l'Acad., and Littré.

³ Cf. also the survey of the different opinions of various scholars as to the original meaning of the Germanic group in Grimm's Deutsches Wörterbuch 14. 2 1, p. 9, s.v. II.

As regards Senn's correction of the primitive Balto-Slavic form (or rather root) which I had written as **dik-* from an IE **dīg-*, my attention was on the Slavic development. I consider it quite obvious that I meant the vowel resulting in Lith. *y*, Lett. *ī*, and Slavic *i*.

GEO. S. LANE

THE PROTO-ALGONQUIAN ARCHETYPE OF 'FIVE'¹

Bloomfield, *LANGUAGE* 1. 139 sets up [nyānanwi] as the archetype of Fox [nyānanwi], Menomini [nianan], Ojibwa [nānan], Plains Cree [niyānan] (using in the archetype, Fox, Ojibwa, and Cree [a] in place of [α] which I think historically and phonetically correct, even if of no importance otherwise, since true [a] is lacking in these). This is one of the very rare instances in which it can be shown that Bloomfield is in error: the error is induced by considering only the Algonquian languages mentioned, for Tête de Boule (a Cree r-dialect, that is, one in which original [l] appears as [r]) [niyārən], Shawnee [nyālənwi], Miami, Peoria [yālənwi] (?[yálanwi], Gatschet; [yālānwi'], Michelson; rhetorical?), Munsee [nalan], Abnaki [nalan'] very plainly call for [nyālənwi] as the archetype (Plains Cree [niyānən] and Moose Cree [niyāləl] are considered below). But the case is not simple. It is clear that the basis of the difficulty is that Proto-Algonquian [l], [θ], and [n] merge into [n] in Algonkin, Ojibwa, Ottawa, Potawatomi, Menomini, Fox, Sauk, Kickapoo, Natick, and Mahican (though [n] from original [n] in all is not subject to mutation owing to the influence of an immediately following vowel), whereas in Delaware, Munsee, Miami, Peoria, Passamaquoddy, Penobscot, Malecite, Abnaki, Micmac [θ] and [l] merge into [l], though original [n] remains, while in Plains Cree [θ], [l], [n] appear as [t, y, n]: so that [l] and [y] are merged (as known, in other Cree dialects original [l] either remains, as in Moose; or appears as [r], as in Isle à la Crosse, Tête de Boule; or appears as [d] in Wood Cree; or becomes [n], as at Albany, etc.); in Cheyenne [n] remains normally, but [θ], [l], [y] merge into [t]: but they are not subject to all the phonetic shifts of original [t]; in Arapaho [l] and [n] merge into [n] into which original [w] also falls), while [θ] remains (but not every Arapaho θ is original, e.g., original [tɕ] becomes [θ]); in Atsina [θ] and [t] merge into [t] while [n] remains (with which original [l] and [w] merges); in Nā^awašināhāna^a (to judge from the rather scanty material) [θ] [l] [n] suffer nearly the same changes as in Cheyenne; Bāsa^awunena^a apparently agrees with Arapaho

¹ Printed by the courtesy of the Smithsonian Institution.

in all the changes under discussion; in Blackfoot [n] remains while [θ] and [l] apparently merge into [t]. [The facts regarding Cree, Fox, Menomini, and Ojibwa have long been known; the other points are mostly novel, though any one can see my indebtedness to Bloomfield, and (to a much lesser extent) Kroeber, and Sapir. Detailed phonetic shifts can not be given here, but it is important to bear in mind that in Arapaho initial [ny-] becomes [y-]. Tête de Boule words are given me by the Rev. Dr. John Cooper but are in my transcription.] Under these circumstances I believe that methodologically an Algonquian archetype should be set up on the basis of the 'normal' Central-Eastern group covering the languages most widely distributed; and that deviations from this should be considered as secondary. This archetype is [nyāl̥anwi], as given above: it will satisfy not only the phonetic requirements of Tête de Boule [niyār̥an], Shawnee [nyāl̥anwi], Miami, Peoria [yāl̥anwi], Munsee [nalan], Abnaki [nalan'] (see above), but also Fox [nyānanwi], Menomini [nīanan], Ojibwa [nānan], etc. The Proto-Cree form [niyāl̥an] is demanded by Tête de Boule [niyār̥an]: Plains Cree [niyānan] and Moose Cree [niyāl̥an] are assimilations of this in different directions; normally we should expect Plains Cree [niyāyan], and Moose Cree [niyāl̥an]. A parallel is Moose Cree [ililiw] 'man' for [iliniw] (Proto-Algonquian [ilen̥wα]; Tête de Boule [iriniw], Plains Cree [iyiniw], Shawnee [hileni], Menomini [inānw], Ojibwa [inini], Arapaho [hinen], etc.). Dissimilation may also have played a part in the transformation of Plains Cree [niyānan]. Mahican [nō'n̥an], [nun̥n̥] show the natural variations of a dying language, but otherwise conform to our archetype. It is true that Nā'waθināhāna' [niotanāhā'] (which is obscure in termination) could be based upon the archetype given; but as it is an Arapaho dialect it is much more likely that it must be considered with Arapaho proper. Arapaho proper has [yóθan], Atsina [yātani]. This presupposes [nyāθanwi], not [nyāl̥anwi]. Owing to the merging pointed out above, [nyāθanwi] will satisfy the requirements of all the forms given save the Cree ones which can not be derived from it (Bāsa'wūnena' supports [θ] in the archetype, but the word for 'five' presents so many phonetic shifts, which are regular but complex, that I omit discussion). Owing to this same merging, [nyāl̥anwi] will account for all the forms save the Arapaho one. We must choose between normal Tête de Boule [niyār̥an] and divergent Arapaho [yóθan]. For there are no known phonetic shifts which will harmonize them. As a matter of principle we must rely upon normal rather than divergent Algonquian. We are confirmed in this choice by the word for 'five' in another aberrant Algon-

quian language, namely, Cheyenne [nóhun]. Clearly this is related in some way with the words under discussion: but there are no known shifts to derive this from either [nyāl̥anwi] or from [nyāθ̥anwi]. As it is absolutely isolated it can scarcely be considered as standing for anything original. Summing up, we may say with certainty that [nyān̥anwi] can not be the Proto-Algonquian archetype for 'five'; the archetype must be either [nyāl̥anwi] or [nyāθ̥anwi], with the chances very greatly in favor of the former.

Malecite, Micmac, Passamaquoddy [nān], [nan] is shown to be secondary by Abnaki [nalan'], for the Eastern Algonquian languages are all very closely related. Some Algonquian languages have forms going back to utterly different archetypes, and since these can not have been Proto-Algonquian they are not considered here.

TRUMAN MICHELSON

BOOK REVIEWS

Die hethitische Hieroglyphenschrift, eine Vorstudie zur Entzifferung (Zeitschrift für Assyriologie NF 5. 165-212, Oct. 1929). By PIERO MERIGGI.

Sur le déchiffrement et la langue des Hiéroglyphes 'Hittites' (Revue Hittite et Asianique 2. 1-57, Oct. 1932). By PIERO MERIGGI.

Zur Lesung der 'hethitischen' Hieroglyphenschrift (Orientalistische Literaturzeitung 36. 73-85, Feb. 1933). By PIERO MERIGGI.

Hittite Hieroglyphs I (Oriental Institute of the University of Chicago, Studies in Oriental Civilization). Pp. xxii + 88. By IGNACE J. GELB. Chicago: University of Chicago Press, 1931. Reviewed by Meriggi, OLZ 35. 562-6; Albright, Am. Journ. Sem. Lang. 49. 61-6; Bossert, Archiv für Orientforschung 8. 132-44.

Šantaš und Kupapa, Neue Beiträge zur Entzifferung der kretischen und hethitischen Bilderschrift (Mitteilungen der altorientalischen Gesellschaft 6. 3). Pp. 88. By HELMUTH TH. BOSSERT. Leipzig: Harrassowitz, 1932. Reviewed by Meriggi, OLZ 35. 657-62; Friedrich, AOF 8. 242-3.

Die Datierung des Heiligtums von Yasili-Kaya (Forschungen und Fortschritte 9. 18 f., Jan. 1933). By HELMUTH TH. BOSSERT.

Die hethitische Bilderschrift (Oriental Institute of the University of Chicago, Studies in Ancient Oriental Civilization, No. 3). Pp 62. By EMIL O. FORRER. Chicago: University of Chicago Press, 1932.

Les inscriptions Hittites hiéroglyphiques, Essai de déchiffrement suivi d'une grammaire hittite hiéroglyphique en paradigmes et d'une liste d'hiéroglyphes, livraison 1 (Monografie Archivu orientálního 1). Pp. 119. By BEDŘICH HROZNÝ. Praha: Orientální Ustav; Paris: Geuthner; Leipzig: Harrassowitz, 1933.

Long before the discovery of the cuneiform inscriptions of the Hittite empire whose capital was Hattusas (the modern Boğazköi) in eastern Asia Minor, scholars had become familiar with hieroglyphic inscriptions from northern Syria and southern Asia Minor. For many years these documents have been called Hittite, and although we now know that the name does not properly apply to them we had better continue to use it until we find out what they should really be called. Many attempts to

read the Hittite hieroglyphs have been made, but progress has until recently been discouragingly slow. Now the works listed above have put the problem on an entirely new footing; we may confidently hope to understand these documents within the near future.

Meriggi's first article deals with some fundamental problems of the system of writing and identifies several important nouns of relationship without, however, discovering their phonetic character. His other two articles, as well as the reviews mentioned above, are devoted to coordinating the results recently obtained by other scholars with Meriggi's own observations; the article in *OLZ* is occupied chiefly with phonetic interpretation and closes with an excellent sign list, while the article in *RHA* deals chiefly with larger linguistic questions.

Gelb's monograph is the first part of what will apparently be a rather comprehensive treatment. It contains many sound and useful observations, but the author is unable to distinguish between the certain, the probable, and the improbable, and so all his conclusions must be checked. There is an excellent bibliography (pp. xvii-xxi).

Bossert turned to the study of the Hittite hieroglyphic inscriptions as a result of his interest in the Cretan inscriptions,¹ and the earlier part of his monograph is devoted (1) to showing the presence of the god Šantaš and the goddess *Kupapa* (= *Kuβήβη*) in inscriptions of both classes and (2) to proving the connection of the two hieroglyphic systems. The greater part of the paper, however, treats of the phonetic interpretation of proper names in the Hittite hieroglyphic texts. Bossert is, of course, by no means a pioneer in this matter, but his extensive knowledge of the archeological and historical data enables him to extend considerably as well as to establish more securely our knowledge of the content of the inscriptions and of the phonetic values of the signs.

In his brief article in *FF*, Bossert reads the name of king Hattusilis and of his capital Hattusas in the hieroglyphic inscriptions in the shrine of Yasili-Kaya near Boğazköy.

Forrer's monograph consists of two lectures, one read on September 9, 1931, before the International Congress of Orientalists in Leiden and first published in the *American Journal of Semitic Languages and Literatures* 48. 137-69, and the other read on March 15, 1932, at the University of Geneva. Forrer establishes a large number of hitherto unknown facts although his method is by no means so new as he would have us believe. Toward the close of the second lecture he indulges

¹ Cf. *Die Beschwörung einer Krankheit in der Sprache von Kreta* (*OLZ* 34. 303-29 = April 1931).

in some far-reaching speculations that are no better founded than his famous discovery of Greeks and Trojans in the Hittite cuneiform texts.² It is possible that Pelasgians were, as he thinks, the authors of the hieroglyphic inscriptions and that the language should be called 'Tabalic', but so far we have no good reason for either assumption.

Hrozný's monograph is the first installment of a series of translations of hieroglyphic texts accompanied by very full commentaries giving the reasons for the translations. In this first fascicle we have a text of about 240 characters followed by a complete translation and sixty pages of commentary on the first 17 signs. There are also several pages (12-16) of general remarks on the genetic affinities of the language of the inscriptions; a number of paradigms (77-98) which are extremely important 'malgré leur caractère préliminaire' (77); and finally an excellent sign list (101-16), which however, must be modified in the light of the one published by Meriggi (OLZ 36. 83 f.).

Of these five scholars Meriggi and Bossert have employed thoroughly sound method and have shown becoming modesty in announcing their results. The other three have disfigured their work by undervaluing the contributions of their predecessors and by unseemly boasts of what they themselves have done.³ Not only is such a spirit extremely distasteful; it not infrequently blinds one to the need for further study. More serious still is the ignorance of linguistic science repeatedly displayed by the same three men.⁴ Nevertheless our thanks are due in large measure to all of them.

² On these see Sommer, Ahhijava-Urkunden, and my review in *LANG.* 8. 299-304.

³ When, for example, Forrer, in his opening sentence, says that he owes 'vielleicht ein Zehntel' to his predecessors, his count may be quite correct; but what he has taken from others is in general the most certain part of his book, and he has rejected more than one correct conclusion that was already in print.

⁴ Gelb 10: 'The vine branch is followed by signs which spell *tirsa* [really *tu-wa(r)-si!*]. Now if we take into consideration a common phonetic interchange between *i* and *u*, this word would correspond perfectly to the Greek *θύρα*.' Gelb 13: 'This close relationship between *r* and *l* is well known from Egyptian and Chinese also.' Forrer 30: 'Die Lesung dieses Zeichens muss folgende Bedingungen erfüllen: sie muss (1) "Stein" bedeuten, (2) den ersten Teil des Namens eines Königs von Gargamis bilden, und (3) mit *r* am Ende den Namen einer der fünf Grossmächte ergeben. Da kam mir zugute, dass ich seinerzeit bei E. Littmann neupersisch ... gelernt habe und mir deshalb neupersisch *sang* "Stein" ... einfiel.' [The other two requirements are met by *Sangara*, the name of a king of Charchemish and by *Sanhara*, an early name of Babylon; see Meriggi, OLZ 36.791.] Hrozný 55: 'Le mot "hittite"-Hiéroglyphique pour "le lièvre" est fort intéressant. De nos jours encore en Anatolie, le lièvre est nommé par les Turcs

Hrozný's monograph, being the latest, gives the best account of this language yet available. It is not, however, a book to be relied upon or to be used without the checks provided by the other works in the above list (especially Meriggi, RHA 2. 1-57, OLZ 36. 73-85). No doubt Hrozný himself recognizes the tentative nature of many conclusions that are stated quite positively—he labels the monograph 'Essai de déchiffrement'; at any rate it is necessary to use the book with the utmost caution.

It would be impossible in the space of a review to list the new contributions of our five authors. I shall merely summarize the present state of our knowledge, and then discuss briefly the relationship of the newly recovered language.

A number of the ideograms have long been known and several more have now been quite certainly identified. The general principles of the system of writing are understood and the values of fully half the phonetic signs have been surely determined. The fortunate circumstance that words are sometimes written twice, once with a more or less clearly recognizable picture and once with phonetic characters, helps materially with the vocabulary. Enough words and inflectional endings have been learned to show that we have to do with a language closely related to Hittite—so closely related, I am convinced, that Hittite will from now on be a chief factor in the decipherment of the hieroglyphic writing.

As to the close relationship with Hittite all our authors except Bossert are in agreement, and his brief argument for a relationship with Hurrian is not convincing (see Meriggi, RHA 2. 42 ff.). Some of the arguments advanced for this thesis are of no value, but the following forms are sufficient to prove it.

	Singular Endings of <i>a</i> -stem Nouns	
	Heiroglyphic Hittite	Cuneiform Hittite
Nom.	-as	-as
Gen.	-as, -a	-as

... *tavšan*. Étant donné que le mot hiéroglyphique peut être lu aussi *ta-p-ša-la-ā* ou *ta-b-ša-la-ā*, et que, dans les langues de ces pays ... les sons *b*, *bh*, et *v* alternent souvent, je ne crois pas être trop hardi en comparant ces deux mots ...' [A note on p. 118 records the discovery that there is a good Turkish etymology for *tavšan*, but our author is still inclined to think that there is some truth in his absurd guess!] 71: [There is a suffix *wala* in Hittite and perhaps in the hieroglyphic texts also; its force is unknown, but it is appended to a hieroglyph that may represent the double axe.] 'Si *x-va-lá* signifie originairement, a peu pres "qui manie la double hache", on pourrait rappeler pour *-vala* la racine indoeuropéenne **val-* "être fort" ...'

Dat.	-a, -ai, -aya	-e, -a, -ai, -iya
Acc.	-an	-an
Singular Endings of <i>i</i> -stem Nouns		
Nom.	-is	-is
Gen.	-ias, -is	-iyas
Acc.	-in	-in

Pronouns

<i>amu</i> 'I'	<i>amuk</i> 'I'
<i>ames, meas</i> 'my'	<i>-mes</i> 'my'
<i>-as</i> 'he, she'	<i>-as</i> 'he, she'
<i>-an</i> 'him, her'	<i>-an</i> 'him, her'
<i>apas</i> 'is'	<i>apas</i> 'is'

Imperative Third Singular Endings

Active	-tu	-tu
Medio-passive	-ru	-ru

Vocabulary

-wa, particle appended to first word of a sentence.	-wa, particle appended to first word of a quotation.
<i>man</i> 'if'	<i>man</i> 'if'
<i>aya-</i> 'make'	<i>ya- (i-ya-)</i> 'make'

There are some indications that the relationship to Luwian is even closer than to Hittite. Thus the preterit active of *aya-* 'make' shows 1 s. *ayaha*, 3 s. *ayata*, 1 pl. *ayamen*, 3 pl. *ayata* (to be read *ayanta*?), with which one must compare the Luwian preterit endings 1 s. *-ha*, 3 s. *-(t)ta*, 3 pl. *-nda* (3).⁵ The enclitic *-ha* 'que' is common to Luwian and the hieroglyphic texts. The hieroglyphic word for 'father' is *tatas*, and the same meaning has been plausibly suggested by Friedrich⁶ for the Luwian plural *tatinzi* (HT 1. 2. 6). The stem *muwa-* which appears in personal names of southern Asia Minor and northern Syria from Hittite times through classical antiquity, and which Friedrich⁷ was inclined to ascribe to Luwian, apparently occurs in the hieroglyphic documents in the sense of 'male' or the like (Meriggi, RHA 2. 16).

Hrozný (12 f.), however, is quite sure that our texts are not composed in Luwian, chiefly because they contain a demonstrative *yas* 'this' which is foreign to Luwian and because they do not contain the Hittite and Luwian relative-interrogative-indefinite stem *kwi-*. He might have added that the characteristic Luwian plural suffix *-inzi* has not been

⁵ See Sommer, AU 62 fn. 1, 71, 108, 389.

⁶ Kleinasiatische Forschungen 1. 372 fn.

⁷ Kf 1. 359-78.

found in the hieroglyphic texts. These arguments, however, do not weigh much. As long as our phonetic interpretation of the hieroglyphs is incomplete we cannot be certain that any particular feature is absent from the texts, and our Luwian material is so scanty that we cannot be sure that the language has no pronoun *yas*.

As to the relative-indefinite pronoun Hrozný is certainly in error. He posits for the pronoun *yas* the meanings 'hic', 'qui', and 'aliquis, quis'; but, while a relative *yas* will surprise no Indo-Europeanist, an indefinite *yas* (also *yas yas*!) is very strange indeed. Now the relative-indefinite stem is regularly written with a special initial character that is rarely if ever used in writing other words; demonstrative *yas* is written *ya-s*, but Hrozný's relative-indefinite *yas* is written *yá-s*. Hrozný alleges several instances of *ya* in the relative stem and of *yá* in the demonstrative stem, but the forms occur in obscure passages and I am not convinced that he is right about any of them. Forrer reads *ki* instead of *yá* in the relative-indefinite stem, and other scholars leave the sign uninterpreted. I see no reason why we may not read *kwi* and thus obtain the relative stem that appears in the cuneiform Luwian texts.

But there is another possibility, and I am surprised that Forrer overlooked it. He has himself pointed out⁸ the Hittite dialectic *pīpīt* = *kwiit kwiit* in the first Arzawa letter (VBoT 1. 5, 9) and has called attention to the presence of an identical form in Lydian. Since Arzawa pretty certainly lay in Luwian linguistic territory it is quite possible that the relative stem in that language was *pi-* and that that is the value of the hieroglyphic character under discussion. Perhaps the stem *kwi-* in cuneiform Luwian is due to contamination with Hittite. The presence of a word *kuman* 'when' in the hieroglyphic texts scarcely makes against this suggestion; IH *ku* + consonant may well have survived while *kw* + vowel became *p*. We must await further material before a decision can be made.

At any rate it is quite clear that the language of the hieroglyphic inscriptions is very closely related to Hittite and Luwian, and consequently it is in order to use our knowledge of Hittite for advancing the interpretation of the former. Perhaps I may be allowed a single illustration. Hrozný (49 f.) has found the word for 'grandfather' in a number of passages where the context guarantees the meaning. He reads the nom. sing. *ju-u-s*, but the second sign, which is very common, is certainly to be read *ha* (with Forrer and Meriggi). The reason Hrozný gives for

⁸ Forschungen 2. 60-4 (1926).

his reading of the first sign would not be conclusive in any case, and besides it is an inference from his mistaken reading of the second sign; the value of this first sign is entirely unknown. Now the Hittite word for 'grandfather' is *huhas*, and since its second syllable coincides with that of the hieroglyphic word, *huhas* 'grandfather' should be assumed in these texts at least as a working hypothesis.

As Forrer (60) acutely observes, the use of the hieroglyphic writing on their seals by the Hittite monarchs from the nineteenth century on proves that such writing must have had official standing at a slightly earlier date, since one does not otherwise make use of an alien system of writing. Bossert's discovery that the hieroglyphic inscriptions of Yasili-Kaya likewise date from the time of the Hittite empire justifies the belief that hieroglyphic inscriptions on stone as well as on seals antedate the Hittite power. We may hope for documents of the third millennium in a language related to IE whenever adequate excavations are undertaken in central and southern Asia Minor.⁹

E. H. STURTEVANT

Genus und Sexus, eine morphologische Studie zum Ursprung der indogermanischen nominalen Genus-Unterscheidung (Ergänzungshefte zur Zeitschrift für vergleichende Sprachforschung auf dem Gebiete der indogermanischen Sprachen, Nr. 10). Pp. 95. By JOHANNES LOHMANN. Göttingen: Vandenhoeck und Ruprecht, 1932.

In an article entitled 'Essai de chronologie des langues indo-européennes' (Bulletin de la Société de Linguistique 32 [1931] 1-28), Meillet has shown that the feminine gender is of relatively recent origin in the IE languages, having been superimposed upon an earlier system of two genders, of which he calls (11) one animate, although many names of inanimate things belonged to it, and the other neuter or inanimate. In view of the date of the two works it is not probable that Lohmann had Meillet's paper at hand when he began work on the problem; but none the less one may regard his monograph as an argument in support of Meillet's thesis,¹ together with some further development of it.

Lohmann's support of Meillet consists in demonstrating the original

⁹ Since this was written Meriggi has published in RHA 2. 105-19 a review of Forrer's monograph; and in WZKM 40. 234-80 an article entitled Die 'hethitischen' Hieroglypheninschriften I Die kürzeren Votiv- und Bauinschriften.

¹ That is, the thesis outlined above. There is no discussion of Meillet's views on the relative chronology of the IE languages.

functions of the three suffixes that in historic times served to characterize feminines.

The suffix \bar{a} and various suffixes ending in \bar{a} formed abstract nouns. With the suffix \bar{a} alternated an equivalent suffix om , and beside it there was an adjective suffix os ; e.g. Gk. $\varphiυγή$: $-φυξ$; $ζυγόν$: $-ζυξ$; $πέδη$ 'fetter': $πέδον$ 'ground'; $νευρά$ = $νεῦρον$ 'bowstring'; OHG *fedara*: Gk. $πτερόν$ 'wing': Skt. *pātaras* 'flying'. It was but a specialization when \bar{a} came to serve as plural of om , and when abstracts in \bar{a} were used in concrete senses they must have been nearly equivalent to the parallel adjectives in os . That the suffix \bar{a} originally had no connection with feminine gender is shown by Gk. $ναύτης$ 'sailor', Lat. *agricola* 'farmer', etc.

The suffix $\bar{i}s$ was appended to o -stems in the sense of 'belonging to, connected with'. Vedic $vrkṛṣ$ originally meant 'belonging to the wolf, connected with the wolf' and then 'she-wolf'. It is this suffix, not the suffix $\bar{i}/y\bar{a}$ as some have thought, that is to be identified with the genitive \bar{i} of the Italo-Celtic o -stems and with Skt. formations like *grāmī-bhū* 'come into the possession of the village'. That this suffix did not primarily have feminine value is shown by Vedic *rathṛṣ* 'charioteer' and by Slavic *sādi* 'judge' (= OIr. gen. *cuind* < **condī* 'iudicii'). It was frequently used to form derivatives of animal names, as in Vedic $vrkṛṣ$ = ON *ylgr*.

The suffix $\bar{i}/y\bar{a}$ seems to have had much the same force as $\bar{i}s$, but it was not ordinarily appended to primary o -stems. Lohmann feels compelled to admit one outstanding exception to this generalization in Skt. *devī* 'goddess' beside *devas* 'god'; but now Mrs. Hopkins² suggestion that *devī* = Gk. $\delta\bar{\iota}\alpha$ is a derivative of IE **diēus* 'sky' (originally nom. **dēiwi*, gen. **diwyā's*) assigns the word to a u -stem base. The original function of the suffix as a means of forming ordinary derivatives appears in Skt. *nārī*, Av. *nāirī*- 'woman' (with *vridhhi*), Gk. $\mu\epsilon\lambda\iota\sigma\sigma\alpha$ 'bee' from $\mu\epsilon\lambda\iota\tau$ - 'honey' < and also in *devī* = $\delta\bar{\iota}\alpha$ >.

Among Lohmann's improvements on Meillet's theory may be mentioned his treatment of the Armenian a -declension (25-8). Meillet suggests that Armenian may never have had a fully developed feminine; but Lohmann rightly holds that the Armenian confusion of the original \bar{a} -declension with the original $\bar{i}/y\bar{a}$ -declension is understandable only if the two suffixes were at one time functional equivalents. This acute observation makes it impossible to connect the Armenian lack of the

² Indo-European **deiwo*s and Related Words (Language Dissertations 12; Philadelphia, 1932) 51-5.

feminine gender with the superficially similar condition in Hittite; for Hittite shows no traces of ever having had a feminine. It therefore appears that I was right in considering the absence of the feminine in Hittite an archaism peculiar to that language (LANG. 9. 5).

In spite of what I believe to be the essential clarity of his thinking, Lohmann's monograph is disfigured by the curious obscurity that characterizes much of the work produced by the school of Wilhelm Schulze. I hope that I have interpreted correctly, but I have an uneasy fear that I may have read some of my own ideas into the text, and it is altogether likely that another reading of the book will bring to light things that so far have escaped me. Even the best of scholars should try to make themselves clear to ordinary mortals.

E. H. STURTEVANT

Skaldisches Lesebuch, Teil 1: Text. Pp. ix + 97. Hrsg. von E. A. KOCK und R. MEISSNER. Halle: Max Niemeyer, 1931.

As Band 17 of *Rheinische Beiträge und Hilfsbücher zur germanischen Philologie und Volkskunde* appears the text of a skaldic reader. It has an introductory character. In order to offer a wider variety of selections, the editors were forced to omit the bulk of longer poems, as well as those in the *Altnordische Saga-Bibliothek*. Egil's poems are wanting, and all of Gunnlaug's and Hrafn's, in addition to such pieces as *Hákonarmál* and *Eiríksmál*. The selections included illustrate the versatility and the sprightliness of skaldic art, and picture the variety of skaldic forms and style. There are religious poems, skaldic love staves, humorous and satirical verses, hate songs, and staves of unmitigated directness. All these are given with mechanical and orthographical and punctuational helps. Each selection is equipped with an introductory key; and orthographical and grammatical variants in plenty are supplied at the bottom of the page. The text provides a good introduction to the subject.

J. H. JACKSON

Wörterbuch der Litauischen Schriftsprache. Litauisch-Deutsch. Bearbeitet von M. NIEDERMANN, A. SENN, und F. BRENDER. I Band: A-K. Pp. 548. Heidelberg (C. Winter), 1932.

The first fascicle of this newest of Lithuanian dictionaries was issued as long ago as 1926. Eight fascicles have now been finished and have been published as the initial volume of the work. It may safely be said that everyone engaged, for whatever purpose, in the study of

Lithuanian, is eagerly awaiting the appearance of the second and final volume. For there is not so far a single entirely satisfactory dictionary of this language. No doubt the majority of the words current in modern literature would have been recorded in A. Juškevič's *Litovskij Slovar'*¹ or in J. Šlapelis' *Lietuvių ir rusų kalbų žodynas*² had either of them been brought to a conclusion. But the former, so far as I am aware, goes no farther than K, and the latter stops with J. If only the authors of the present dictionary had found it practical to publish the second volume before the first! Lalis' *Lietuviškos ir angliškos kalbų žodynas*³ is the sole remaining aid to the reader of modern Lithuanian. Besides being somewhat out of date, it offers no assistance in the difficult matter of pronunciation, inasmuch as all accents are omitted. Busch-Chomkas' *Lietuviškai vokiškas žodynas*⁴ is so thoroughly bad that it hardly even deserves mention.

The Niedermann, Senn, and Brender dictionary represents in many ways a distinct advance over its predecessors. As its title indicates, it is a dictionary of the language of literature. But an extremely broad view of what constitutes literature is taken: not only belles-lettres but journals and periodicals, official documents of the government, school books, and scientific treatises of every kind have yielded their store of words. Nor has the language spoken by people of culture been disregarded. Many though by no means all of the articles are provided with illustrative sentences, to each of which a German translation is appended. In cases where no suitable illustration for the meaning of a word was discovered in the sources, the authors felt that they were not at liberty to construct one of their own. In other instances, where the significance of a word, in particular of a technical term, was perfectly evident from the translation, such quotations have been omitted, obviously in order to save space. Especially valuable are the idiomatic locutions and prepositional phrases which have been entered in great abundance.

A pleasing feature of the work, because it is so uncommon in Lettish and Lithuanian dictionaries, is the strictly alphabetical order in which the letters follow one another. The diphthongs *ie* and *uo* come after *id* and *un* respectively, the vowels *q*, *e*, *i*, *u* do not take a separate position simply because they were formerly nasalized, and the quantity of a

¹ St. Petersburg, 1897 ff.

² Vilna, 1921.

³ Chicago, 1915.

⁴ Berlin und Leipzig, 1927.

vowel does not affect its place in the alphabetical succession. Since marks of accentuation and of length are found infrequently in Lithuanian texts, this must be considered the only logical procedure. The advantage thus gained is offset to a certain degree by the all too frequent use of the sign of equality or of *s.* (= *siehe*) after words which do not conform to the standard orthography of the Ministry of Education or which are semantically equivalent to other words. In the second case, at least, it is hard to justify this method of saving space.

Each word in the dictionary has been accented in accordance with the manner in which it is pronounced in educated circles in Kovno. This task, indispensable both to the foreign student of the language and to the native desirous of acquiring an exact knowledge of the 'Schriftsprache', has been performed with most commendable care and accuracy by Professor Senn. The accent class to which a noun or adjective belongs can also be learned from the numeral standing between two parallel lines just before the definition.

The Lithuanian literary language, reborn after the recognition of the independence of Lithuania, has not yet been standardized, in so far as the vocabulary is concerned. A multitude of new words, especially *termini technici*, have either been borrowed from some foreign language or have even been artificially created. In many cases, several words defining one and the same notion are in general use. Realizing this present state of instability and flux, the authors decided it was incumbent upon them to record whatever words seemed to them most likely to survive and, if they were loan words, to place beside them their pure Lithuanian (*reinitauisch*) equivalent. Of great assistance to them were the pronouncements published from time to time in the journal 'Lietuva' and the periodical 'Švietimo Darbas' by an official terminological commission. Where exactitude of expression is required, as in the sciences, this attempt to rid the language of unnecessary and confusing terms can only be praised; when, however, the foreign origin of harmless non-technical words is frowned upon in this way, the practice is rather difficult to condone. A great many scientific terms are not provided with synonyms, doubtless because synonyms for them do not exist. Likewise, numbers of loan words that can scarcely be called *termini technici*, although the line between the two classes is often hard to draw, are evidently in good standing, while others are not so fortunate. One learns, for example, that *užklodė* is preferred to *kaldrà* 'Bettdecke', *ántrašas* to *áдресas* 'Adresse, Anschrift', *didvyris* to *herójus* 'Heros, Held', *pāšaras* to *fūteris* 'Pferdefutter, Fourage', and *klaidà* to *fēleris*

'Fehler', but that *agitātorius* 'Agitator, Hetzer', *fālšas* 'falsch', *fanātikas* 'Fanatiker', *flirtas* 'Flirt, Liebelei', *fikcija* 'Fiktion', and *humoristas* 'Humorist' have been readily adopted into the once innocent language. Let us trust that they are used only in speaking of the state of affairs outside of Lithuania.

In defending the inclusion of these very pure Lithuanian synonyms, Professor Brender remarks,⁵ 'Nur so kann sich auch dem Fernerstehenden einigermassen das herausheben und heraus Schälen, was alt und was neu ist, und so sieht er gleichsam ein Stück Geschichte, eine Periode des Werdens der litauischen Schriftsprache vor sich'. But one may be permitted to suppose that etymologies, however brief, of both loan words and native words, 'when the etymology throws light on the meaning of the word or is otherwise of interest',⁶ would have served the purpose as well or better. And it will be a very long while before Būga's great *Lietuvių kalbos žodynas*,⁷ the NED of Lithuanian, reaches its final page.

A few words found in the introduction have been omitted from the text. They are the names of the three accents *akūtas*, *circumfleksas* and *gravis* and the adjective *kompetentinis* 'sachkundig'. It is perhaps conceivable that the first three words were purposely left out, yet other words belonging to the terminology of linguistic science, such as *fonetika* 'Phonetik, Lautlehre' and *flėksija* 'Flexion, Biegung, Abwandlung' have been entered in their proper place. In all other respects the dictionary, both in conception and in execution, is indeed a noteworthy achievement. It is to be hoped that it will soon be finished and that it will be followed, if possible, by a German-Lithuanian part.

FREDERIC T. WOOD

Southern Paiute, a Shoshonean Language; Texts of the Kaibab Paiute and Uintah Utes; Southern Paiute Dictionary. EDWARD SAPIR. *Proceedings Amer. Acad. Arts and Sciences* 65. nos. 1, 2, 3. 1930-1931.

After many years Sapir's Shoshonean linguistic material has appeared, and we may congratulate ourselves on its appearance. For it shows meticulous accuracy in phonetics and is most lucid in presenting an exposition of grammatical principles. It should be noted that the treatment is descriptive, not comparative. This is as it should be in our present state of knowledge. In the reviewer's opinion in recent

⁵ *Tauta ir Žodis*. V. Knygos. Kaunas, 1928. P. 571.

⁶ A. Anstensen in review of Knudsen and Sommerfelt: *Norsk Riksmålsordbok*. Oslo, 1931 f. *Germanic Review*. Vol. VIII, no. 1. Jan. 1933. P. 73.

⁷ Kaunas, 1924 ff.

years there has been altogether too much speculation in American linguistics based on insufficient factual knowledge. Sapir has briefly summed up 'the literature' appurtenant to his work. Contrasting these, we may unhesitatingly say that Sapir's volume has superseded previous work on Shoshosnean linguistics, both in phonetics and in grammatical exposition. At the same time it is only fair to say that Kroeber's earlier contribution, though obviously somewhat deficient in phonetics, and rather sketchy, nevertheless showed a pretty good grasp of the fundamentals of Shoshonean grammar. The Kaibab Paiute texts were obtained from a pupil at the Indian school at Carisle, in 1910, the Uinta Ute ones on the Uinta Reservation in 1910. The general reader will note that apparently Sapir (6) no longer considers Uto-Aztecan related to Kiowa-Tanoan.

TRUMAN MICHELSON

Dakota Texts. Pp. xvi + 279. By ELLA DELORIA. Pub. Amer. Ethn. Soc. (1932).

We are to be congratulated that finally a volume of Dakota texts, accurately recorded, is now available. For, with due respect to such veteran missionaries as Williamson and Riggs, it must be admitted that such texts did not exist previously. And in so far as Miss Deloria's mother tongue is the Oglala dialect, we may be confident that stylistically and syntactically these texts are superior to those previously published. A most helpful aid is the inclusion of a very literal translation of several of the texts, as well as a free translation of all. Interspersed are highly illuminating linguistic and ethnological notes. It will now be possible for any one to verify the recently published 'Notes on the Dakota, Teton dialect' by Franz Boas and Ella Deloria. The only adverse criticism I can make is that no phonetic key is given. Also a concordance showing what tales occur elsewhere would have been welcome, though this remark is hardly appropriate in a purely linguistic journal. My excuse for reviewing the work is that I have a little, though very little, independent knowledge of Dakota.

TRUMAN MICHELSON

NOTES AND PERSONALIA

THE COMMITTEE ON GRADUATE INSTRUCTION, of the American Council of Education, decided on February 4, 1933, 'to prepare in each field of graduate work a list of institutions in which adequate guidance and facilities are offered for graduate work leading to the Doctor's degree'. The plan adopted for this rating was to secure a jury of fifty or more referees in each subject, nominated by the secretary of the national society in that subject, and to send to each of them a tabulation of the institutions which claimed to offer adequate work in the subject, and a list of the instructors offering courses, together with the number of doctor's degrees awarded in the last five years with a major in that field. The execution of this investigation was assigned to President R. M. Hughes, of the Iowa State College (Ames, Iowa), as Chairman of the Committee.

Upon President Hughes's request, the Secretary of the Linguistic Society prepared a list of fifty referees for the subject of Linguistics, chosen carefully to avoid giving undue representation to any institution or to any subdivision of the linguistic field. President Hughes sent out to these referees, under date of May 18, a request for a vote on 'Institutions offering Ph.D. in this field', the list giving the following institutions, to which is here added the number of the names of the instructional force which were listed, and the number stated as that of doctor's degrees in the past five years, in the subject:

Bryn Mawr College	11	1	Harvard Univ.	1	3
Catholic Univ.	3	0	New York Univ.	7	0
Univ. of Chicago	16	3	Princeton Univ.	17	3
Columbia Univ.	23	0	Univ. of Texas	9	0
George Washington Univ.	2	0	Yale Univ.	14	1

There are obvious omissions of institutions, and absurdities in the relative numbers of the teaching faculty; fewer than one fourth of the scholars listed belong to the Linguistic Society, and the great majority of them are interested in Literature and not in Linguistics. Twenty-seven of the referees are connected with the ten institutions listed, but the names of only fourteen appear in the materials furnished by the Committee. The Secretary of the Linguistic Society at once sent an open

letter to President Hughes, under date of May 23, calling attention to the inaccuracy and utter inadequacy of the materials furnished, and the impropriety and injustice of basing any rating upon an investigation so conducted. He sent this letter to the referees also, many of whom have informed him that they are in hearty agreement with his attitude.

It is fitting that the members of the Linguistic Society should be aware of what is being done in the name of educational revaluation, and of the utter incompetence manifested in the present inquiry. A similar state of affairs exists in the materials sent out in at least four other fields of graduate instruction; which indicates that the product of the Committee's investigation will have no value except that of doing harm to institutions rated below their true merits.¹

THE THIRD INTERNATIONAL CONGRESS OF LINGUISTS will be held at Rome, September 19-26, 1933.

THE SEVENTH INDIAN ORIENTAL CONFERENCE will be held at Baroda in the winter of 1933 under the patronage of His Highness the Maharaja Gaekwad of Baroda and his Government. The objects of the Conference are to bring together Orientalists in order to take stock of various activities of Oriental scholars in and outside India; to facilitate coöperation in Oriental studies and research; to afford opportunities to scholars to give expression to their views; to promote social and intellectual intercourse among Oriental scholars; to encourage traditional learning. The Conference will be divided into a number of sections, including one on 'Philology'; besides reading and discussion of papers, there will be a performance of a Sanskrit drama and visits to local places of interest. The Central Committee cordially invites all who are interested in Oriental Learning to join and support the Conference; correspondence should be addressed to the Local Secretary, Seventh Indian Oriental Conference, Oriental Institute, Baroda, India.

THE COMMITTEE ON NOMINATION OF OFFICERS FOR 1934 consists of Carl D. Buck, University of Chicago, Chairman; Edgar H. Sturtevant; Leonard Bloomfield. Members of the Society are invited to send suggestions for nominations for the various offices to the Chairman of the

¹ [And to students who go to institutions rated above their merits. The Council should have known that information of the kind desired can be obtained best from the various learned societies themselves. G. M. B.]

Committee, in time to reach him by October 5. For the details of the present system of nominations, they are referred to LANGUAGE 6. 267-8.

THE COMMITTEE ON PUBLICATIONS has accepted the following additional works for publication:

LANGUAGE MONOGRAPH NO. 14: Word-Studies in French and English, by Professor T. Atkinson Jenkins, University of Chicago.

LANGUAGE MONOGRAPH NO. 15: Indication, by Professor W. E. Collinson, University of Liverpool; publication of the International Auxiliary Language Association, Inc., edited by Alice V. Morris.

LANGUAGE DISSERTATION NO. 16: Old High German Prepositional Compounds in their relation to their Latin originals, by Harold Rosen (University of Pennsylvania dissertation).

LANGUAGE DISSERTATION NO. 17: The Neuter Plural in Vergil, by John Flagg Gummere (University of Pennsylvania dissertation).

'THE RECORD OF DARIUS'S PALACE AT SUSA', an article reprinted from JAOS 53. 1-23, presents a revision of the text given in The Recently Published Old Persian Inscriptions (reprinted from JAOS 51. 189-240 as a Special Publication of the Linguistic Society); a complimentary copy will be sent to any purchaser of the earlier version who will apply to the author, Prof. R. G. Kent, Bennett Hall, University of Pennsylvania, Philadelphia.

L'INDEX GENERALIS 1933 has appeared, containing the essential information upon institutions of higher learning throughout the world, with the personnel of their faculties; and upon learned societies, libraries, and the like. The volume for 1933 is the thirteenth issue, and amounts to 2437 pages. A new feature is a series of short biographies of scholars, for the insertion of which a small charge is made. The Director, Monsieur R. de Montessus de Ballore, 46 rue Jacob, Paris VI, will be pleased to receive inquiries upon this and other matters.

PROFESSOR NATHANIEL JULIUS REICH has founded a new journal, MIZRAIM, *Journal of Papyrology, Egyptology, History of Ancient Laws, and their Relations to the Civilizations of Bible Lands*, of which the first volume has appeared. It contains 195 pages and 16 plates. As the subtitle indicates, the journal is of comprehensive scope, but is devoted primarily to Egypt and its cultural influence in the Ancient Near East. The first

volume contains five articles by the editor, one by Professor W. F. Albright, and one by Professor Raymond P. Dougherty.

EDWARD CHIERA, a member of the Linguistic Society from 1930 to 1932, died at Chicago, June 20, 1933, in his forty-eighth year.

He was born at Rome, Italy, on August 5, 1885, and received his higher education at Crozer Theological Seminary, Chester, Pa., and at the University of Pennsylvania, where he received the degree of Ph.D. in 1913. He was Instructor in Assyriology 1913-9 and in Semitics 1919-22, Assistant Professor of Assyriology 1922-6, and Professor of Assyriology 1926-7, at the University of Pennsylvania; from 1927 on, he was Professor of Assyriology at the University of Chicago and Editor of the *Assyrian Dictionary* of its Oriental Institute. During the last ten years he conducted a number of campaigns of excavation in Mesopotamia, notably at Nuzi and Khorsabad. He was a member of numerous learned societies, and was decorated Chevalier of the Crown of Italy, in 1918; he was the author of many volumes in the Sumerian and Accadian fields. His early death is a grievous loss to Oriental scholarship.

DR. E. ADELAIDE HAHN, of Hunter College, New York City, has been promoted from an Assistant Professorship to an Associate Professorship of Latin.

FELIX HOWLAND, of Washington, D. C., has been appointed Honorary Field-Worker of the Linguistic Society, and has gone to Persia to pursue researches in the dialectology of the region.

ROLAND G. KENT has been appointed Correspondant de l'Institut de Phonétique, University of Paris, of which Professor Pierre Fouché is Director.

HORACE I. POLEMAN, of Philadelphia, received the degree of Ph.D. at the University of Pennsylvania in June, 1933, and is engaged for the academic year 1933-4 upon a survey and catalogue of Indic manuscripts in the United States and Canada, as part of The American Council of Learned Societies' plan to survey and catalogue all Oriental manuscripts in these countries.

GEORGE K. STRODACH, whose doctoral dissertation appeared in the Linguistic Society's series of Language Dissertations as No. 14, dated

March, 1933, has gone to Lafayette College as Instructor in Latin, succeeding David B. Kaufman, also a member of the Linguistic Society, who has been compelled by ill-health to give up teaching.

THE FOLLOWING NEW MEMBERS for 1933 have been received into the Linguistic Society subsequent to the last published list, and up to June 24, 1933:

Prof. Wm. F. Kamman, Carnegie Institute of Technology, Pittsburgh, Pa.

Dr. Fang-Kuei Li, National Research Institute of History and Philology, 1455 Jessfield Road, Shanghai, China

Prof. E. W. Scripture, 25 Howard Road, Coulsdon, Surrey, England. (Experimental Phonetics, Univ. of Vienna)

Miss Eloise B. Vaughn, 208 Spring St., Winston-Salem, N. C. (French and German, Salem College)

THE RELATION TO HITTITE VERBS IN *-a(i)-* TO THE THEMATIC VOWEL CLASS

WALTER PETERSEN

UNIVERSITY OF CHICAGO

[An attempt to show that the Hittite *ai*-verbs are not continuants of IE *āyo*-verbs, but an analogic modification of IE denominatives in *-ā-mi* thru association with forms of the thematic verbs.]

For the Hittite verbs with stems in *-a(i)-*, e.g. *hatr-a-mi* 'I write' 3 sg. *hatraizzi*, or *handami*, *handaizzi* 'establish', what is perhaps an acceptable explanation was found by Götze, Madduwattas 97 (Hetitische Texte in Umschrift, herausgeg. v. F. Sommer, Heft 3) and Sturtevant, LANG. 5.9 f. Starting from the fact established by the former, that the *ai*-forms occur only where the IE thematic vowel was *e*, and that those forms which had the *o*-grade always have *-a-*, the latter concluded that the *a(i)*-class represented the IE denominatives in *-ā-īo-*. In *hatranzi* < **hatrayanti* IE **-ā-īo-nti*, for instance, the *y* dropped between two vowels of the same quality, while the ending of *hatraizzi* comes from IE **-ā-īe-ti*.

While none of the objections which might be urged against this theory are in themselves insurmountable, another explanation which avoids these difficulties may appear more convincing, and consequently, with due reservations, I suggest below an alternative which seems to me to be beset with fewer difficulties.

The objections to Sturtevant's interpretation are the following. In the first place, the change of IE **-ā-īe-* to Hitt. *-ai-*¹ is not supported by other clear examples or by parallel changes in partially different combinations. Secondly, and this is the most serious, the development of the *-ā-īo-* stems as presupposed does not coincide with the development of the certain *-(i)īo-* stems in Hittite. The latter have generalized the *o*-grade (Hitt. *a*) of the thematic vowel and show *e*-forms only occasionally, and then usually differ in their phonetic development from the *a(i)*-stems. The normal endings are *-iya-mi*, *-iya-si*, *-iya-zi*, *-iya-weni*,

¹ Forms like those in *-iyasi* show that *ī* was retained between some unlike vowels without loss of either of the surrounding vowels, so that there is a strong presumption against *-ā-īe-* having become *-ai-*.

-iya-teni, *-iyanzi*. When *e*-forms appear we usually find *-iye-*, not *-i-*, e.g. the 2 sg. in *-i-ye-si*, the 2 pl. imper. in *-i-ed-du* (i.e. *-iyeddu*); sometimes *-ye-* appears even in the province of the *o*-grade, e.g. 3 pl. *-i-en-zi*², or 3 pl. imper. *-i-en-du*. See Delaporte 59. Only in the 3 sg. do forms corresponding to *hatraizzi*, e.g. *izzi* 'he does', occur, and this fact leads to the suspicion of an analogical change in such instances, such as must certainly be assumed for some other 3 sgs. in *-izzi* (see below). We have therefore the right to assume that the normal development of the IE *-(i)ǵo*-stems in Hittite is that represented by the common endings *-iyami*, *-iyasi*,³ etc., and that consequently there is no great probability that the difference between IE *o*-grade and *e*-grade was kept intact in the *ǵo*-denominatives, unless we can assume that the whole process was completed in pre-Hittite times.

Here, however, we are in the midst of a chronological difficulty. If the dropping of the *y* and consequent contraction of like vowels goes back to the pre-Hittite period, we cannot account for *hatranzi* on the basis of IE **ǵo-nti* at all, for, in contrast to the ending *-es* < *-ejes* (nom. pl. *i*-stems) the vowels were not alike as yet. If on the other hand the process was late⁴ we would naturally suspect that the IE *-(i)ǵo*-class

² If *-enzi* here is IE **-enti* it does not concern us in this connection, but is merely another instance of the encroachment of the athematic conjugation in Hittite.

³ From the variation between *-i-ya-zi* and *-i-ye-iz-zi* and the like in the third person singular, and between *-i-ya-an-zi* *-i-an-zi* and *-i-en-zi* in the plural, it is safe to conclude that there was an actual variation between *e*- and *o*-grades. The other alternative, that of Sturtevant, Hitt. Gram. 54f., is to assume that the sign for *-ya-* was also used with the value *-ye-*. Against this is the fact that *e* and *a* were otherwise carefully distinguished as well as the improbability that when to designate *ǵe* unambiguous combinations like *-i-en-* were available and actually in use, the Hittites nevertheless preferred the ambiguous *-ya-* which usually designates *-ǵa-* and not *-ǵe-*. It is hard to believe that the conservatism of the Hittite scribes would overcome the tendency to use the clearer and better means of representation which they themselves occasionally used. Furthermore, Sturtevant's positive reasons for assuming the use of *-ya-* for *-ye-* are etymological and historical, e.g. because *-ya-* is found where *-ye-* existed in IE times, as in above *-yazi*, it must here be pronounced *-ye-*. This is an extremely precarious argument in view of the ease with which such forms are explained as actual variations. Unless therefore the use of *-ya-* for *-ye-* is established by instances in which there is no possibility of analogical change or ablaut variation, Sturtevant's assumption is merely a distant possibility and does not dispose of the heavy burden of proof resting upon it.

⁴ Forms like *da-ski-mi*, in which *i* took the place of *a* < IE *o*, as opposed to **da-ska-mi* presupposed below by the theory there presented, do not favor the assumption of a late origin of *hatrami* < **aǵō-mi*, for in that case we would ex-

had reached the stage in which *-ia-* had regularly taken the place of *-ie-*. To make the explanation possible we would have to take refuge in the doubtful assumption that it all took place in an intermediate period in which IE *o* and *a* had already been confounded, but the *-(i)io-* stems still retained the old distribution of *e-* and *o-* grade.

A final objection to Sturtevant's hypothesis is the relatively great importance of the *a(i)-* class in Hittite in contrast to the comparative subordination of IE denominatives in *-āio-*. This is most convincingly explained by confusion with the IE thematic vowel class, which, except for verbs in IE *-(i)io-* and *-sĥo-*, exists only in remnants in Hittite, i.e., the Hittite *a(i)-* class was largely the heir also to the thematic vowel class. The reason for this is easily found according to the interpretation given below, but is difficult from Sturtevant's point of view.

The alternative which seems to me to avoid these objections is to connect the Hitt. verbs in *-a(i)-* not with the IE denominatives in *-āio-*, but rather with those in *-ā-*⁵ without the *io-* suffix, the type which, although it is in some languages thoroughly confused with the former, appears clearly in such forms as Aeolic τῖμα-μεν 'we honor' : τῖμα 'honor', Lat. *plantā-mus* 'we plant' : *planta*, Goth. *karō-m* 'we are worrying' : *kara* 'care, worry'. See Brugmann, Gr.² 2.3.160, 162 ff. After IE *ō* became Hitt. *a* and the differences in quantity disappeared, these verbs became totally indistinguishable from the thematic vowel class in all those forms in which the latter had the *o-* grade. Thus *-ā-mi* and *-ō-mi* both became Hitt. *-a-mi*, and *-onti* and *-ā-nti* both became *-anzi*. Similarly the *-an-* of Hitt. *hatr-an-un* 'I wrote' could go back both to IE *-ā-m* as well as *-o-m*. Such forms were the starting point for the confusion of the two classes which led to the restriction of the

pect the 1 sg. to be **hatra-ye-mi* or *-yi-mi*, which could not be fitted into Sturtevant's hypothesis.

⁵ Kurylowicz, *Symbolae Grammaticae in honorem Joannis Rozwadowski* 1.102, connects with the IE denominatives in *-ā-* rather the Hitt. *h*-class (Sturtevant compares Hitt. *newah-* 'renew' with Gr. *νεᾶν*, Lat. *novāre*). However, to make credible a hypothesis which compares zero in all other languages with an extant sound in one, we need evidence of the previous existence of such a sound in at least one other language. In this instance there is no such evidence, and considerations of probability are decidedly against the assumption of the loss of *h* in the *ā*-denominatives, for the use without change of the nominal stem in *-ā-* as stem of denominative verbs is so decidedly a primitive category, that the theory of the previous existence of the *h* will scarcely be taken seriously in this instance. Moreover, the identity of the root part of *newah-* and Lat. *novāre* etc. does not mean anything as long as the suffixal part is not obviously identical.

thematic vowel class in Hittite to a greater extent than in any other group, the closely related Tocharian included⁶.

In order to understand the influence the thematic vowel class exerted on the *ā*-class in the confusion, it will be well to take a look at the Hittite remnants of the former, and to observe the shape which it has taken, for it certainly has not disappeared altogether, and there can be no question of the thematic vowel class having developed in Indo-European after the separation of Hittite. Such an assumption would be improbable because of the archaic nature of the conjugation, and because it had already become more productive in IE times than any other class.

The Hitt. *sk*-class (IE *-skō-*)⁷ is not only one of the two numerous representatives of the thematic verbs, but is also the most unequivocal; for it preserves on the whole even the IE distribution of *e*- and *o*-grade. Thus with the 2 sg. *daskisi*⁸ < **do-ske-si* cf. Lat. *crē-sci-s*, with the 3 sg. *daskizzi* < **do-ske-ti* cf. Lat. *crē-sci-t*. In the 1 pl. the *-a-* of Hitt. *da-sga-weni* corresponds to the *o* of Gr. *φέρ-ο-μεν*, in the 2 pl. the *i* of *da-ski-tteni* is the *ε* of Gr. *φέρ-ε-τε*, in the 3 pl. Hitt. *da-sga-nzi* has the IE *-o-* as well as the personal ending *-nti* like West-Greek *φέρ-ο-ντι*, Att.-Ion. *φέρουσι*. Only the 1 sg. *da-ski-mi* always shows the *e*-grade in place of the expected *o*, evidently through association with the 2 and 3 sg. with *i* from IE *e*. Conversely the 2 pl. *da-sga-tteni* beside *da-ski-tteni* is due to the influence of *dasgaweni* and *dasganzi*, so that there is a tendency to use *i* in the singular and *a* in the plural. In the imperative the IE distribution of grades of the thematic vowel was retained throughout. With the 2 sg. *da-ski* cf. Gr. *φέρ-ε* or *γί-γνω-σκε*, with the 3 sg. *da-ski-ddu* cf. *γί-γνω-σκε-τω*, with the 2 pl. *da-ski-tten*⁹ cf. *γί-γνώ-σκε-τε*, with the 3 pl. *da-sga-ndu* cf. *γί-γνω-σκε-ντων*. In the preterite, on the other hand, the *e*-grade won out everywhere, whence *daskinun*, *daskes*, *daskit*, *daskiwen*, *daskitten*, *daskir*. Strangely enough,

⁶ Cf. Schulz-Sieg-Siegling, Tocharische Grammatik 350 ff.

⁷ To be accurate we should not perhaps use the sign *k̂* to refer to IE palatals as represented in the *centum*-languages, since it is probable that the palatals were a purely dialectical development of the *satem*-languages, and never existed in the remaining IE territory. Cf. Hirt, BB 24.218 ff.; Idg. Gram. 1.233 ff.

⁸ Forms like *daskisi* in which *i* consistently represents IE *e* instead of alternating with *e*, are probably due to the assimilative influence of the *i* of the final syllable, although there must have been some spreading by analogy. In favor of this view is also the fact that in the 2 preterite we find the thematic vowel as *e* in such forms as *daske-s*, IE **-ske-s*, where there was no following syllable with *i*.

⁹ The 2 pl. imperative is also found with the *o*-grade of the thematic vowel, cf. *daskatten*.

the *a*¹⁰ occurs only in the alternative form of the 2 pl. *dasgatten*, where it was not original, but due to the existence of the 2 pl. pres. *dasgatteni* beside *daskitteni*.

Thematic forms also occur in the conjugation of *uwa-* 'come' and *kappuwa(i)-* 'count'. Of the latter, which is reckoned as belonging to the *a(i)*-class, the following forms must be thematic in origin: the 2 sg. pres. *kappuvesi*, the 3 sg. *kappuwezzi* or *kappuwizzi*,¹¹ the 2 sg. pret. *kappuwit*, the 3 sg. *kappuwet* beside the *ai*-form *kappuwwait*, also the imperative 2 and 3 sg. *kappuwi* and *kappuwiddu* beside *kappuwai* and *kappuwaiddu*. Of *uwa-* thematic forms are e.g. the 3 sg. *u-i-zzi*, 2 and 3 pret. *u-it*, and the imper. 2 sg. *u-i-ddu*.

We may now go back to the relation of the *a(i)*-verbs to the thematic conjugation, a relation which here concerns mainly the origin of forms of the former which have an *i* before the personal ending. The distribution of these forms is best seen by putting in parallel columns the conjugation of an *a(i)*-verb, *hatrami* 'I write', and that of the thematic *daskimi* 'I take'. Starred forms mean that while those quoted are not actually found, yet their existence is guaranteed by corresponding forms of other verbs of the same class. In case of **dask-a-mi* and **dask-a-nun* the star indicates that such a form must have existed in prehistoric times when the IE distribution of ablaut grades of the thematic vowel was still intact, although it had disappeared before the earliest Hittite documents.

I Present Indicative

Sing. 1	<i>hatr-a-mi</i>	<i>*dask-a-mi</i>
2	<i>hatr-a-si</i> or <i>hatr-ai-si</i>	<i>dask-i-si</i>
3	<i>hatr-ai-zzi</i>	<i>dask-i-zzi</i>
Plur. 1	<i>*hatr-a-weni</i> or <i>hatrauni</i>	<i>dasg-a-weni</i>
2	<i>*hatr-a-tteni</i> or <i>*hatr-ai-tteni</i>	<i>dask-i-tteni</i>
3	<i>hatr-a-nzi</i>	<i>dasg-a-nzi</i>

II Preterite Indicative

Sing. 1	<i>hatr-a-nun</i>	<i>*dasg-anun</i>
2	<i>hatr-ae-s</i> or <i>hatr-ai-s</i>	<i>dask-e-s</i>
3	<i>hatr-ai-t</i>	<i>dask-i-t</i>

¹⁰ A sporadic occurrence of an IE *o* in its original domain is *tar-si-ga-u-e-en* (1 pl.) in KBo. 3.19.2.19.

¹¹ Occurrence of assimilated beside unassimilated forms is not surprising, both because of the complicated conditions under which instantaneous sound changes like distance assimilations took place, and because of the disturbing effect of analogy.

III Imperative

Sing. 2	<i>hatr-ai</i>	<i>dask-i</i>
3	* <i>hatr-ai-ddu</i>	<i>dask-i-ddu</i>
Plur. 2	<i>hatr-a-tten</i> or * <i>hatr-ai-tten</i>	<i>dask-i-tten</i>
3	* <i>hatr-a-ndu</i>	<i>dasg-a-ndu</i>

This tabulation brings before our eyes what Götze had demonstrated, that the *ai*-forms, sometimes obligatory, sometimes optional, occur only and always where the thematic conjugation has or originally had an *i* or *e* (IE *e*), whereas there is no trace of the *i* in those forms which had the IE *o*-grade (Hitt. *a*). However, instead of assuming that *hatraizzi*, for instance, came from *-āyeti*, I consider *i* as having been brought over analogically from the thematic verbs to the *ā*-conjugation. We may put it in this way: in forms like *daski-zzi* the *-izzi* was abstracted as personal ending instead of the original *-zi*, and was then added in this capacity even to vowel stems, e.g., *hatra-izzi* after *dask-izzi*¹² as wrongly analyzed. This transfer was of course assisted by the close association between the thematic and the *ā*-conjugation which arose through the external identity of the forms with the thematic *a* and the corresponding ones with *-ā*. It might be added that the development of a form in *-aizzi* could be also accounted for if the first stage had been, e.g., **hatrizzi* with substitution of the thematic *i*, and that¹³ then **hatrizzi* and **hatrazzi* were contaminated to the existing *hatraizzi*.¹³

The conclusion that *-izzi* of *hatraizzi* and the like was due to analogical transfer from the thematic conjugation receives further confirmation from the appearance of the same *-izzi* in stems for which Sturtevant's explanation is impossible and which therefore must be analogical. Such forms are, above all, those of the *nu*-stems of the type *arnumi*, where *-u-izzi* occurs beside the original *-u-zzi* as in *ar-nu-zzi*.¹⁴ So may

¹² To those who insist on a proportion before they can accept an analogy I submit the following possibility. For the similar *arnu-izzi*, following Sturtevant, this proportion may be invoked: *arnu(w)-izi* : *arnu(w)anzi* = *dask-i-zi* : *daska-nzi*. If this is accepted *hatraizzi* can follow thus: *arnu-izi* : *arnu-mi* = *hatra-izi* : *hatra-mi*.

¹³ Also the verbs which vary between the *mi*- and *hi*-conjugations could have played an important part. The endings of the 3 sg. present of the two conjugations, *-zi* and *-i*, were readily contaminated to *-izi* (spelled *-iz-zi*). Thus in our *a(i)*-class *ara-i* 'rises again' may account for *ara-izzi* in place of original **ara-zi*.

¹⁴ Possibly also *uizzi*, classified as an old thematic form above, may be merely an analogical formation of the type here discussed, the *i* then spreading to *uit* and *widdu*. Only certain knowledge of the etymology and stem-formation of this verb could decide which alternative is correct. It is in fact difficult in many

be explained, although other interpretations are here possible, also forms of *pehute*- 'bring' like the 3 sg. *pe-e-hu-te-iz-zi* or the 2 pl. *pe-hu-te-it-ta-ni*.

Since the interpretation of the Hitt. *a(i)*-class here given avoids the difficulties encountered by Sturtevant's theory, we may conclude that it is considerably more probable, all the more so because it connects the Hitt. class with the primitive *ā*-denominatives rather than the *-ā-īo*-class which spread at the expense of the former, if not after the general differentiation of IE languages, at least almost certainly after the separation of Hittite. The Hitt. *a(i)*-verbs were merely the IE *ā*-class which became confused with the thematic verbs in the *ō*-forms of the latter, and then adopted the *i* of the *e*-forms before their personal endings in the remaining forms.

instances to decide between old thematic forms and analogical extension of the thematic conjugation to originally athematic forms, for even Hittite, with its general recession of the thematic type, doubtlessly shows its analogical extension in some instances.

ON THE DUAL IN HOMER

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[An effort is made to show that none of the Alexandrians attempted to foist his theory of the dual into the text of Homer, but that each followed the manuscript evidence as he had it. Instances of the 'false' dual are found chiefly in interpolations, although there are one, or possibly two, passages in which a 'false' dual has been created by the use of borrowed materials.]

The general opinion of classical philologists is well reflected by Oldfather when he speaks¹ of 'Zenodotus and Aristophanes, who, as is well known, held a somewhat heterodox view about the equivalence of the dual and the plural in Homer'. This belief needs, in my opinion, correction.

Linguists have worked to a clear understanding in general of the forces that produced the welter of dual and plural forms found in the text of Homer. In the epic dialect the dual is an inheritance from Aeolic, but its use is being continued and imitated by Ionic-speaking poets, who have no dual in their daily dialect, and the result is naturally deviation from the earlier usage.² Just how far this deviation extended during the composition of the Iliad and the Odyssey is a question about which, in my opinion, the linguists have been led astray by a misunderstanding of the philological evidence. There is a secondary increase of the confusion due to interpolation which must be sorted out, and also a tertiary increase of two sorts. First, we have linguistic evidence,³ most strongly marked in Zenodotus, for Ionic influence upon the text in post-Pisistratean times. To this I should ascribe the substitution of *-τον -σθον* for *-τε -σθε* with the stoppage of a legitimate hiatus which, except for Γ 279 (discussed below), is found only in Zenodotus, and, to a great extent at least, the confusion of *νῶι σφωι* with *νῶιν σφῶιν*, and of *σφωι* with *σφωε*. Second, from the beginning of the 4th century on

¹ Class. Phil. 22.99 (1927).

² Wackernagel, Spr. Unt. z. Hom. 54-5, expresses it well.

³ Cf. my External Evidence 35-6, and the references to Meister and Wackernagel there given.

the dual is dying in Attica, and later copyists must have been influenced by that fact. The MSS used by Aristarchus will have been on the average a generation later than those used by Aristophanes, and still later than those of Zenodotus. For this reason it is not surprising to find Aristarchus and Ω reading plural forms where duals are earlier attested. It is not that any of the three was emending according to his theories; each was following the preponderance of his MSS, but the evidence of these had shifted.

Let us take up these questions separately, beginning with the last.

The plural forms in parentheses are the readings of Aristarchus and of Ω . The scattering variants need not be quoted as they represent at best the picking up of a reading from the scholia, and may be no more than an effort to regularise the syntax such as even a late copyist might make. In all examples the dual is 'properly' used.

Zenodotus read:

- Λ 347 νῶιν δὴ τὸδε πῆμα κυλινδεται ὄβριμος Ἑκτωρ.
ἀλλ' ἄγε δὴ στέωμεν καὶ ἀλεξώμεσθα μένοντες (μένοντες)
P 103 ἄμφω κ' αὖτις ἰόντε (-τες) ἐπιμνησαίμεθα χάρμης

Aristophanes read:

- I 4 ὥς δ' ἀνέμω (-μοι) δύο πόντον ὀρίνετον ἰχθυόεντα
 Λ 102 νῆε δύο Πριάμοιο νόθον καὶ γνήσιον ἄμφω
εἰν ἐνὶ δίφρῳ ἔόντε (-τας)
 Λ 135 εἰ νῶι ζώω (-οὺς) πεπύθοιτ' ἐπὶ νηυσὶν Ἀχαιῶν
N 613 ἅμα δ' ἀλλήλων ἐφικέσθην (-κοντο)
P 718 αὐτὰρ ὀπισθε
νῶι μαχησόμεθα Τρῳσὶν τε καὶ Ἑκτορι δίῳ
ἴσον θυμὸν ἔχοντες (!) ὁμώνυμοι, οἳ τὸ πάρος περ
μῖνονμεν ὄξυν Ἄρηα παρ' ἀλλήλοισι μένοντε (-τες)
 Σ 525 δύο δ' ἔποντο νομῆες
τερπομένω (-νοι) σύριγξι.

In one case a larger and more interesting variant is attested. Both Zenodotus and Aristophanes read:

- α 37 εἰδὼς αἰπὺν ὄλεθρον, ἐπεὶ πρό οἱ εἶπομεν ἡμεῖς,
'Ερμείαν πέμψαντε διάκτορον ἀργειφόντην

while Aristarchus and Ω had πέμψαντες εὐσκοπον, and the Massilian text:

πέμψαντες Μαίης ἐρικυδέος ἀγλαὸν υἱόν.

Furthermore, Oldfather has shown⁴ that Chrysippus knew the line in the form in which Zenodotus and Aristophanes presented it, so that it cannot possibly be an emendation by Zenodotus. Now the use of the

⁴ Loc. cit.

dual here is not merely correct; it is surprisingly idiomatic. Debrunner, *Glotta* 15. 20-1 (1927), rightly recognises that we are to expect the dual in cases that may be represented by a formula $1 + x = 2$,—a principle of interpretation found already in the scholia. Here the dual means, then, Zeus and the other gods which is one of the interpretations given in §HMQ. The example is better than either of those cited by Debrunner. In E 487 the \bar{a} of $\alpha\lambda\acute{o}\nu\tau\epsilon$ in the vulgate is inexplicable,⁵ and we must follow Bentley in transposing to:

μή πως, ὥς ἀψίσι λίνου πανάγροιο ἀλόντες
ἀνδράσι δυσμενέεσσιν ἔλωρ καὶ κύρμα γένησθε.

The other example is:

Ψ 413 αἱ κ' ἀποκηδήσαντε φερώμεθα χεῖρον ἄεθλον.

For the dual Aristonicus (§A) offered as one explanation ἀποκηδήσαντε ἐγὼ τε καὶ ὑμεῖς which was accepted by Ameis-Hentze, and after them by Debrunner. Leaf condemned it as 'too far-fetched', and gave what I consider the fundamentally correct explanation, tho I dislike his formulation of it. Motives akin to those that produce the plural of courtesy have led to a shift within the clause. Antilochus begins by placing the blame upon the horses, but includes himself finally in the failure:

'if you two losing heart (get the worse prize)'

'if you two losing heart,—we get the worse prize'.

In a 38 πέμψαντε could have been written only by a speaker of Attic and not later than the 5th century. If the line were essential, that would lead to valuable conclusions; this, however, is far from being the case, and the line is probably to be judged an interpolation διὰ τὸ καὶ ἐτέρως φέρεσθαι.

This is the full extent of the heterodoxy of Aristophanes—the preservation of a few duals that have disappeared from the later tradition.

Let us take next the instances of -τον -σθον for -τε -σθε which are, with a single exception, found only in Zenodotus. In his text one example

Ψ 753 ὄρνυσθ' οἱ καὶ τούτου ἀέθλου πειρήσεσθον (-σθε)

is no more than a mistaken repetition of line 707 in which a pair of wrestlers are invited to contend. The other passages are:

Γ 459 ἐκδοτε καὶ τιμὴν ἀποτίνετον (-νέμεν) ἣν τιν' ἔοικεν

Z 112 ἀνέρες ἔστε θοοὶ καὶ ἀμύνετον ἄστεϊ λώβην
(φίλοι, μνήσασθε δὲ θούριδος ἀλκῆς)

Θ 502 ἀλλ' ἦτοι νῦν μὲν πειθώμεθα νυκτὶ μελαίνῃ
δόρπά τ' ἐφοπλίζεσθον (-πλισόμεσθα) · ἀτὰρ καλλίτριχας ἵππους

⁵ Cf. Schulze, KZ 29.236.

- N 627 μάψ οἷχεσθον ἄγοντες (-σθ' ἀνάγοντες), ἐπεὶ φιλέεσθε παρ' αὐτῇ
 O 347 νηυσὶν ἐπισσεύεσθον (-σθε), ἐὰν δ' ἔναρα βροτόεντα
 Σ 287 ἥ οὐ πω κεκόρησθον (-σθε) ἐελέμενοι ἐνδοθι πύργων
 Θ 251 παῖσατον (-τε), ὥς χ' ὁ ξείνος ἐνίσπη οἷσι φίλοισιν.

Of these N 627 is a clerical blunder, which, at the most, shows that the scribe would not be shocked by the use of οἷχεσθον as a plural. It is not necessary to discuss the larger variants in the others; because, starting from the Zenodotean test, it is clear that it must be emended by restoring the plural with legitimate hiatus. This is especially obvious where *ε* is 'neglected': ἀμύνετον (*ε*)άστεϊ, κεκόρησθον (*ε*)ε(*ε*)ελέμενοι. The corruption is best understood by associating it with the influence that brought into Zenodotus' text late Ionic forms such as ἐμεωντόν, ἐπιστάται, ὄλλοι, δένδρει.

There is one passage in the vulgate which seems to be on a par with these:

- Γ 278 καὶ οἱ ὑπενερθε καμόντας (-τες)
 ἀνθρώπους τίνυσθον, ὅτις κ' ἐπίορκον ὁμόςση.

Zenodotus must (cf. §A) have read καμόντες making the Dead the subject and taking τίνυσθον as a plural; while Aristarchus argued from the dual form that the subject must be a pair—Persephone and Pluto. The decision of the question belongs in reality to the History of Religion. We have only to note: (1) if the subject is a pair of deities, the text offers no linguistic difficulty; (2) if the Dead are the subject, we must, as Leaf says, read καμόντες . . . τίνυσθε. I think that slight support for the first alternative can be gained (cf. below) from T 265 ὅτις σφ' ἀλίτηται ὁμόςσας. If the decision is in favor of the second alternative, the late Ionic influence has here extended to the vulgate. That is in no way surprising, cf. εἶδew for εἶδω⁶ and the writing of *ev* for *eo*, which has largely dominated the tradition.⁷

Next to be considered is the confusion of νῶι, σφῶι with νῶιν, σφῶιν. The Aristarchean view was that -ι nom.-acc., and -ιν gen.-dat., were two morphemes. Historically, this was no doubt true at a certain time; but we can still see that even the MSS on which the Aristarcheans relied, did not always justify their opinion. Instances will be cited below in which their text contains a nom.-acc. νῶιν (σφῶιν) that was misinterpreted as gen.-dat. by them. In the text of Zenodotus (it reflects no doubt the MSS underlying it) -ι -ιν appear at first sight as alternant forms of one and the same morpheme. On closer examination

⁶ Wackernagel, *SUH* 73.

⁷ *Class. Phil.* 18.170-7 (1923).

we must conclude that the situation really is: $\nu\omega\iota$ and $\nu\omega\iota\nu$, $\sigma\varphi\omega\iota$ and $\sigma\varphi\omega\iota\nu$ are alternant forms for the nom.-acc., but $\nu\omega\iota\nu$, $\sigma\varphi\omega\iota\nu$ alone can function as gen.-dat. Variants that seem to contradict the latter statement occur only at K 546 and δ 62, and there is good reason to mistrust them. Now, if the confusion went back to the poets, we would expect to find it working in both directions. This, however, is not true of a copyist: he can at times change $\nu\omega\iota$ to $\nu\omega\iota\nu$ in the belief that he is meeting the requirements of the metre, but he never has a temptation to change $\nu\omega\iota\nu$ to $\nu\omega\iota$ for the same reason. In the main, therefore, this confusion must be the work of the Ionicistic copyists whom we have already found indifferent to the distinction between $-\tau\omicron\nu$ and $-\tau\epsilon$, $-\sigma\theta\omicron\nu$ and $-\sigma\theta\epsilon$. There is one passage in which $\nu\omega\iota\nu$, nom., is metrically secure, but that passage is an interpolation. The material follows. Nominative:

Π 99 $\nu\omega\iota\nu \delta' \acute{\epsilon}\kappa\delta\ddot{\upsilon}\mu\epsilon\nu \delta\lambda\epsilon\theta\rho\omicron\nu$.

Neither the attempt to interpret $\nu\omega\iota\nu$ as dative, nor the reading of $\nu\omega\iota$ (H^bPY^cY^o) is worthy of serious consideration. We must, as Wilamowitz⁸ has seen, recognize a metrically secure $\nu\omega\iota\nu$ nominative. Π 97–100 were athetised (SA) by Aristarchus, the propriety of whose judgment is still debated—Wilamowitz warmly defending the lines, and Bethe⁹ summarily pronouncing them an interpolation. I also believe them interpolated, but cannot here discuss the question.

Λ 767 $\nu\omega\iota \delta' \acute{\epsilon}\nu\delta\omicron\nu \acute{\epsilon}\omicron\nu\tau\epsilon\varsigma$

Some MSS improve the metre by reading $\delta\acute{\epsilon} \tau'$ (JTP^x), $\delta\acute{\epsilon} \gamma'$ (Q), or $\delta\acute{\epsilon}$ (Ω), and the first group is followed by Ludwig. Wrongly, the verse can be an $\acute{\alpha}\kappa\epsilon\varphi\alpha\lambda\omicron\varsigma$. Lines 767–85 were athetised by Aristophanes and Aristarchus, and are probably interpolated. It is therefore possible that the weakly attested (HE^c) and metrically easier $\nu\omega\iota\nu$ was the original reading.

N 326 $\nu\omega\iota\nu \delta' \acute{\omega}\delta' \acute{\epsilon}\pi' \acute{\alpha}\rho\iota\sigma\tau\acute{\epsilon}\rho' \acute{\epsilon}\chi\epsilon \sigma\tau\rho\alpha\tau\omicron\upsilon$

As Wilamowitz, loc. cit., has seen, the sentence is anacoluthic and $\nu\omega\iota\nu$ is not genitive as Aristonicus (SA) interprets it. His easy emendation to $\acute{\epsilon}\chi\epsilon\iota\nu$ is unnecessary, cf. the text of Zenodotus in:

Θ 139 $\tau\upsilon\delta\epsilon\iota\delta\eta, \acute{\alpha}\gamma\epsilon \nu\omega\iota — \varphi\acute{\omicron}\beta\omicron\nu \delta' \acute{\epsilon}\chi\epsilon \mu\acute{\omega}\nu\nu\chi\alpha\varsigma \iota\pi\pi\omicron\upsilon\varsigma$.

The example is not metrically secure, for $\nu\omega\iota$ can be read (with GX¹) and the verse regarded as an $\acute{\alpha}\kappa\epsilon\varphi\alpha\lambda\omicron\varsigma$.

ψ 52 $\acute{\alpha}\lambda\lambda' \acute{\epsilon}\pi\epsilon\upsilon, \delta\varphi\rho\alpha \sigma\varphi\omega\iota\nu \acute{\epsilon}\nu\varphi\rho\omicron\sigma\acute{\iota}\nu\eta\varsigma \acute{\epsilon}\pi\acute{\iota}\beta\eta\tau\omicron\nu$
 $\acute{\alpha}\mu\varphi\omicron\tau\acute{\epsilon}\rho\omega \varphi\acute{\iota}\lambda\omicron\nu \acute{\eta}\tau\omicron\rho, \acute{\epsilon}\pi\epsilon\acute{\iota} \kappa\alpha\kappa\acute{\alpha} \pi\omicron\lambda\lambda\acute{\alpha} \pi\acute{\epsilon}\pi\omicron\sigma\upsilon\delta\epsilon$.

⁸ Ilias und Homer 122.

⁹ Homer 1.159₆

The example is not metrically secure since σφῶι with legitimate hiatus may be read, as has long been advocated, and is recently done in the Ameis-Hentze-Cauer text.

Another, but doubtful, example is:

- N 55 σφῶιν δ'—ὧδε θεῶν τις ἐνὶ φρεσὶ ποιήσειεν—
αὐτῷ θ' ἐστάμεναι κρατερῶς καὶ ἀνωγέμεν ἄλλους.

The form would not be metrically secure.

Accusative:

The vulgate has two examples probably belonging here, altho the case syntax is more debatable. Neither is metrically secure.

- Δ 341 σφῶιν μὲν τ' ἐπέοικε μετὰ πρώτοισιν ὄντας
ἐστάμεν (σφῶι P^xU^bE^cY^c, Apoll. Soph., §T).
Θ 452 σφῶιν δὲ πρίν περ τρόμος ἔλλαβε φαίδιμα γυῖα (σφῶι XY^c).

The other examples are instances of variants almost all of which are connected with Zenodotus. For N 68 compare La Roche, Hom. Textkr. im Alterthum 319.

- Θ 377 εἰ νῶι Πριάμοιο πάις (νῶιν Zen. and many MSS).
428 νῶι ἐῷ (νῶιν τινές and many MSS).
N 68 Αἴαν, ἐπεὶ τις νῶι θεῶν (νῶιν Zen. (?) DY^bH^bQⁱ).
P 238 ... οὐκέτι νῶι | ἔλπομαι (νῶιν MGTP^xQ^d).
X 216 νῦν δὴ νῶι γ' ἔολπα (νῶιν ἔολπα Zen. Y^c).
A 336 ὃ σφῶι προῖει (σφῶιν Zen. and several MSS).

The remaining example leads into another problem. It is:

- O 155 ... οὐδὲ σφωιν ἰδὼν ἐχολώσατο θυμῷ.

Here the -ν is evidently a 'Hiatus-tilger' as in the previous examples; but the Aristarchean theory demands σφωε and not σφῶι for the accusative of the third person. Heyne so emended the passage and his emendation was adopted by Bekker², Nauck, Fick, Christ, Ameis-Hentze, and (after the reading was found in Y^c) by Leaf. Allen now quotes it from O⁹P¹ (= Y^c) P¹⁶ P²¹, that is from late members of three different families, a fact which tends to show that it has no value as traditional evidence. The Aristarcheans took it most improbably as a dative, §A comparing καὶ σφωιν δὲς ἄγειν. Wackernagel¹⁰ has shown that at one time the inflexion was: nom. νῶι, σφῶι, acc. νῶε, σφῶε, σφωε. How far the poets, how far the copyists, how far Alexandrian schoolmastering has disturbed this situation it is impossible to determine. Corinna and Antimachus knew νῶε which has disappeared from the poems except for isolated variants at Δ 418 (nom), E 219 (unmetrical), Ξ 344. In the pronoun of the second person Zenodotus read σφῶε for the nominative in M 366,

¹⁰ SUH 150,

while Demetrios Ixion had it for the accusative in H 280 = K 552, where it is found also in some manuscripts. In the third person σφωι has here (O 155) been protected by the secondary corruption to σφωιν. It was read also by Zenodotus, Seleucus, and others in A 8 τῖς τὰρ σφωι θεῶν where it can be interpreted, rather artificially, as of the second person. Zenodotus also read:

K 546 ἡ τῖς σφωι πόρεν θεὸς ἀντιβολήσας

where Aristarchus and Ω had σφωε. It would be possible to interpret this pronoun as the dative of the second person: but it would then be the only substantial evidence for a form without -ν as dative. The only other trace is at:

δ 62 οὐ γὰρ σφῶν γε γένος ἀπόλωλε τοκῆων.

Such is the reading of Aristarchus and Ω; it is interpreted (σφῶν = σφωιτέρων) by Wackernagel,¹¹ while an ancient emendation to σφῶν has made its way into all modern texts. Allen reports variants σφωι(ν) γένος, but they could show at the best only another attempt to correct a text that needed no correction.

To the Ionicising scribes one more item must be charged. The vulgate reads:

A 566 μή νυ τοι οὐ χραίσμωσιν ὅσοι θεοὶ εἰς' ἐν Ὀλύμπῳ
ἄσσον ἰόνθ' ὅτε κέν τοι ἀάπτους χεῖρας ἐρείω.

For Zenodotus a reading ἰόντε is quoted with an ἐκ πλήρους writing that is surprising. Such writings are found in the Timotheos papyrus (c. 350 B.C.), and by various errors show that its scribe has undertaken to expand forms which were previously written with elision. We are justified in believing the same thing of the makers of the MSS which Zenodotus used. All, then, that is traditional is IONΘOTE, and ἰόντε is merely an interpretation (not at all surprising) by Ionicistic scribes which Zenodotus has perpetuated. For us it has no binding force, and we may with Leaf take IONΘOTE as ἰόντα ὅτε, tho the closest parallel is δλεθρόν τινι χραισμεῖν H 143, A 120, Y 296.

We are now ready for the criticism of the Alexandrians. Zenodotus has not foisted heterodox theories upon the text, but has been in reality hyperconservative. His own Ionic dialect gave him at the start no sensitiveness for the dual, and he either failed to acquire it, or believed himself bound to follow his MSS thru thick and thin. In either event he was left at the mercy of his Ionicistic copyists, and perpetuated the errors they had made. The text of Aristophanes and of Aristarchus is on the whole an improvement; but how far the improvement rests on

¹¹ SUH 147-50

emendation, how far on the collation of MSS free from later Ionicisms cannot be determined exactly. The distinction between ΣΦΩΙ and ΣΦΩΕ must also remain doubtful. In the Aristarchean text the dual has at points been supplanted by the plural, but our information is on this subject incomplete.

I turn now to the 'incorrect' uses of the dual that must be charged either to the poets or to interpolators. Wackernagel¹² has called attention to a very interesting passage. In Attic a man's parents are invariably called (quite surprisingly) his *τοκῆς* or *γονῆς* and in Homer too the plural *τοκῆς* is repeatedly used; but once, θ 312, Hephaistos speaks of his parents as *τοκῆς δύο*. This is in one of the latest parts of the Odyssey—the Tale of Ares and Aphrodite—and we can only believe that the poet has slipped, using the dual where it would certainly be expected, but is for some unknown reason barred.

The criticism¹³ of:

λ 578 γῦπε δέ μιν ἐκάτερθε παρημένω ἥπαρ ἔκειρον

does not seem justified. The poet has not said 'two vultures' which would be γῦπε δύο but 'a pair of vultures', because he imagines them either to be mates, or to be united by Zeus into a team (cf. *ἵππῳ*) for the purpose of this punishment. There is no occasion to interpret as 'a pair of vultures on each side' (2x2), cf. χ 181 τῷ δ' ἔσταν ἐκάτερθε παρὰ σταδμοῖσι μένοντε.

I need not linger over three passages explained by Debrunner 17. In the first:

θ 48 (cf. 35) κούρω δέ κρινθέντε δύο καὶ πεντήκοντα
βήτην

The forms are dominated by *δύω*, cf. Delbrück, Vgl. Synt. 1. 143, where OCSl *dŭva na desęte koša* (dual) 'twelve baskets' is cited as a parallel.

τ 444 τὸν δ' ἀνδρῶν τε κυνῶν τε περὶ κτύπος ἦλθε ποδοῖν

is simply a distributive dual (X x 2), and it would be pedantic to expect the poet to give recognition to the fact that dogs have four feet.

P 386 γούνατά τε κνήμαί τε πόδες θ' ὑπένερθεν ἐκάστου

χείρες τ' ὀφθαλμοί τε παλάσσετο μαρναμένοιιν

is hardly to be interpreted with Ohler 25, Ameis-Hentze, and Leaf, as referring to the two armies. The weakly attested *μαρναμένοιισιν* or Brandreth's *μαρναμένοιιο* would remove the difficulty; but the number of *παλάσσετο* is so surprising, that it seems simpler to believe that the lack of congruence comes from the use of borrowed material.

¹² SUH 54-5

¹³ Delbrück, Synt. Forsch. 4.17; Wackernagel, SUH 54; Debrunner 19.

That the plural is used for the dual, the construction jumping often from one number to the other, is well known; and the facts have been collected and arranged by Ohler in his useful article. Whether the dual is also used for the plural is a more difficult problem. In 1916 Wackernagel, *SUH* 55, still left it an open question; but in 1926 in his *Vorlesungen* 1.78-9 he maintained that examples do occur, and in the following year Debrunner 16-17 endorsed this opinion. It requires, I think, modification.

That the usage is found in the later epic poetry from the Homeric Hymns on has been established by these scholars beyond the possibility of a doubt. But three of the Homeric examples cited by Wackernagel as certain (A 567, Γ 279, 459) have been examined already and found textually invalid. Two others recognised by him and (with slight qualification) by Debrunner 19 are in passages that must be considered interpolations.

Θ 70 ἐν δ' ἐτίθει δύο κῆρε ταηλεγέος θανάτοιο,
 Τρώων θ' ἱπποδάμων καὶ Ἀχαιῶν χαλκοχιτώνων.
 ἔλκε δὲ μέσσα λαβών, ῥέπε δ' αἷσιμον ἥμαρ Ἀχαιῶν.
 [αἱ μὲν Ἀχαιῶν κῆρες ἐπὶ χθονὶ πουλυβοτείρῃ
 ἐξέσθην, Τρώων δὲ πρὸς οὐρανὸν εὐρὺν ἄερθεν.]

75 αὐτὸς δ' ἐκ Ἰδῆς μεγάλ' ἔκτυπε, κτλ.

The lines have been omitted or bracketed by many editors and Wilamowitz, *IIH* 43¹⁴, has recently condemned them. They were athetised by Aristarchus, and there is no reason to presume that his motive was to get rid of this instance of a 'false' dual. The lines are plainly a gloss on the close of line 72, and stand in glaring contradiction to the *δύο κῆρε* of line 70, which, as the scholia point out, it would be absurd to interpret distributively—two for each side. If the interpolator so understood it, even he did not use the dual 'falsely'; cf., for instance, Ψ 500-1 *οἱ δὲ οἱ ἵπποι ὑψόσ' ἀειρέσθην*.

Hector in urging on his team speaks to the horses in the dual *ἀποτίνετον*, *ἐφομαρτεῖτον* (metrically secure), *σπεύδετον*, and these duals became 'false' only if he is driving a four-horse team, and the opening line of his speech:

Θ 185 Ζάνθέ τε καὶ σύ, Πόδαργε, καὶ Αἰθων Λάμπέ τε δῖε
 is genuine. Altho Leaf defends the line, the weight of editorial opinion is against it; and I shall merely refer to Wilamowitz's condemnation¹⁴ of the verse.

¹⁴ *IIH* 46

I can add another example that is the result of interpolation. Aristarchus athetised the close of Poseidon's speech:

- O 212 ἄλλο δέ τοι ἐρέω, καὶ ἀπειλήσω τό γε θυμῷ ·
 αἶ κεν ἄνευ ἐμέθεν καὶ Ἀθηναίης ἀγελείης,
 Ἥρης Ἑρμείω τε καὶ Ἡφαίστοιο ἄνακτος,
 215 Ἴλιου αἰπεινῆς πεφιδήσεται, οὐδ' ἐθελήσει
 ἐκέρσαι, δοῦναι δὲ μέγα κράτος Ἀργείοισιν
 ἴστω τοῦθ', ὅτι νῶιν ἀνήκεστος χόλος ἔσται.

The most recent tendency¹⁵ is to dissent from this verdict; in my opinion wrongly, but I need not argue the question. The misuse of νῶιν is not mentioned among the grounds for the athetesis, and could not of itself have led to such a result, since the removal of line 214 would regularise it. This line is condemned by Ameis-Hentze, Leaf, and Wilamowitz—by the last for reasons that have nothing to do with νῶιν—and there can be no doubt that it at least is interpolated.

The duals of I 182-98 remain. Their subjects are the ambassadors of Agamemnon—Odysseus, Aias, Phoenix; the strained interpretation of Ohler 24 being very properly rejected by Debrunner. We have then to choose between recognizing 'false' duals, or getting rid of Phoenix. Wackernagel, whom Debrunner follows, prefers to admit the 'false' duals explaining the fact by the late date of the ninth book. His reason is that if Phoenix is eliminated—that is eliminated entirely—damit würde 'der Edelstein aus der Krone dieser jungen Dichtung ersten Ranges gebrochen' (Wilamowitz IIH 65). The reason is perfectly valid, such a thing should not be done; but there is no need of going to that extreme. Years ago I showed in AJP 23.431-3 for very different reasons that 'in the original version of the Embassy Phoenix was not one of Agamemnon's envoys, but present as an attendant of Achilles'. What I then said, erred in regarding the Meleagros episode as a later accretion, but otherwise I can refer to this article for details. The changes made to produce the present status of Phoenix as ambassador are not large quantitatively, but so independent in spirit that it is not possible to mistake them for the work of an interpolator. They come from the poet who put this part of the story in its present shape—be he the 'Author of Θ', or the 'Composer of our Iliad'. I should say, then, that in the original version of the Embassy these duals were 'properly' used; but that they became 'false' duals, when in the reworking of the story the ambassadors were increased to three. The fact that the lines

¹⁵ Cf. Ameis-Hentze, Anh.; Leaf; Wilamowitz, IIH 234 n.; Wecklein, Zenodot und Aristarch 61.

were allowed to stand—to avoid the labor of recasting the passage—shows a certain lack of sensitiveness for the meaning of the forms; and yet is quite different from using the forms ‘falsely’, when one is composing more freely. It is the limit at which the poets of the Iliad and Odyssey seem to have stopped, the next step brings the ‘false’ duals of the Homeric Hymns and the later epos.

Possibly there is another instance of this sort. Wackernagel, Beitr. z. Lehre v. gr. Akzent 26, recognizes that in Homer *σφε* is dual, and seeks to explain as *σφι* the two passages in which it seems to be plural. The first needs no defense:

Λ 113 ὥς δὲ λέων ἐλάφῳ ταχείης νήπια τέκνα
 ῥηιδίως συνέαξε λαβὼν κρατεροῖσιν ὁδοῦσιν,
 ἐλθὼν εἰς εὐνὴν, ἀπαλὸν τέ σφ' ἦτορ ἀπηύρα.

The doe is imagined as having a pair of fawns, and the shift from the plural τέκνα to the dual *σφε* is not surprising. Compare the similar simile:

δ 335 ὥς δ' ὁπότε ἐν ξυλόχῳ ἔλαφος κρατεροῖο λέοντος
 νεβροὺς κοιμήσασα νεηγενέας γαλαθηνοὺς
 κνημοὺς ἐξερέησι καὶ ἄγχεα ποιήεντα
 βοσκομένη, ὃ δ' ἔπειτα ἔην εἰσήμενεν εὐνὴν,
 ἀμφοτεροῖσιν δὲ τοῖσιν ἀεικέα πότμον ἐφήκεν.

The other passage is:

Τ 264 ἐμοὶ θεοὶ ἄλγεα δοίεν
 πολλὰ μάλ', ὅσσα διδοῦσιν ὅτις σφ' ἀλίτῃται ὁμόσσας.

La Roche, Hom. Stud. 188, has shown that the finite forms of ἀλιτέσθαι take the acc., the dat. being found only with ἀλιτήμενος which has been almost completely adjectivised. The presumption is therefore in favor of *σφε* rather than *σφι*. We are brought again to the question raised in connection with Γ 279 as to who punished perjury. If the answer is a pair of chthonic deities, then it is probable that this hemistich has been lifted from a context in which *σφε* referred to them—for instance a pair of gods who ἀνθρώπους τίνυσθον ὅτις σφ' ἀλίτῃται ὁμόσσας. A poet who did so showed a lack of proper feeling either for the number of *σφε* or for the case construction,

ROMANCE ETYMOLOGIES

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1. Provençal *escacha*, *escaicha*, *escaissa*, 'break with the teeth', 'break', 'tear', 'bite' is not mentioned by Meyer-Lübke. The forms *escacha*, *escaissa* seem to be regular reflexes of **excoactare*, **excoactiare* 'to smash', the *ai* in *escaicha* being due to the attraction of *escaissa*. Meyer-Lübke does mention French *écacher* 'to smash' along with French *cacher* 'to hide' as a doubtful derivative of **coacticare*. These French words seem to be Provençal loanwords from **[ex]coactare*. Provençal *quicha* 'to press', 'to pinch' must have some other source.

2. Italian *frizzare* 'to smart' < **frictiare* : *frictus* : *frigo* 'to roast'. The word was derived by Diez from **frictiare* : *frictus* : *frico* 'to rub'; but the latter etymology presents phonetic irregularity as well as semantic difficulty, and is not repeated by Meyer-Lübke,¹ who omits the word. The phonetic development **frictiare* > *frizzare* may be regular. In *rizzare*, *dirizzare* we have, to be sure, a voiceless *zz* from *cty* (< **rectiare*, **directiare*), but the examples hardly establish a phonetic law. The variant treatment of *cty* in *rizzare* and *frizzare* seems to show a regional divergence.

3. Italian *paggio* 'young servant', French *page* 'page' was derived by Diez from Greek *παῖδιον* 'boy', on the supposition that it was brought from Byzantium during the Crusades. Meyer-Lübke, in his *Romanische Grammatik*,² more plausibly assumed that **padium* was an early Greek loanword, the non-appearance of which in Latin writing is a mere accident. Still, as no other early Greek loanword showing this phonetic development has survived in Romance, the etymology must be declared quite doubtful. Meyer-Lübke himself, in the third edition of his *Rom. Etym. Wb.*, doubts the derivation of *paggio* from *παῖδιον* on the ground that the word is older in French than in Italian. Now it is true that the word is attested in French as early as the thirteenth century; but recognition of that fact does not necessitate the

¹ *Rom. Etym. Wb.* 2.1

² 1. 32.

abandonment of the common assumption that the word came to France from Italy, as the direction of vocabulary loans often has to be made out from the phonology of the words rather than from the dates of their appearance in writing. On this principle, Meyer-Lübke, for example, admits the derivation of Old Spanish *testa* from Catalan *testa* 'head';³ and the derivation of Old Italian *gorgia* from French *gorge* 'throat'.⁴

I propose to derive the Italian word from Vulgar Latin **pageus*, a type parallel with *pagensis* > French *pays* 'country', formed from *pagus* + *-eus* instead of *-ensis*. Meyer-Lübke³ gives about forty examples of the use of the suffix *-eus*, and says that substantivized adjectives (like *lineum* : *linum*) are numerous. The Italian phonology assumed is regular.

After having decided to present this etymology, I found a similar theory set forth in his dictionary by Littré, who mentions Low Latin *pagius* 'page', and postulates the Vulgar Latin type *pagius*.

4. Old French *puirier* 'to hand on', 'to offer' was derived by Diez from *porrigere* 'to reach'; but, as Meyer-Lübke indicates,⁵ this is not clear. In view of the existence of the Old French particle *por*, *puer*, Provençal *por*, *pore*, noticed by Diez⁶ in compounds like Provençal *por gitar* 'to throw away', and by him derived from Latin *porro*, I propose to connect *puirier* with the type **porriare* : *porro* + *-iare*. This formation is analogous to that of **abantiare* > French *avancer*.

5. Provençal *trobar*, French *trouver* 'to find'. Meyer-Lübke⁵ remarks that the derivation of these words from *turbare* 'to disturb' rests on the undemonstrable assumption that the Latin verb developed the meaning 'to pulsate'. The phonetic anomalies presented by the etymology *trouver*, *trobar* < *turbare* are also considerable, including (aside from the defensible metathesis) the assumption of an irregular stem-vowel in Old French *trueve*, Provençal *trɔba*, which naturally suggest that the etymon had an open *o*, and the difficult assumption of the persistence of *b* in Provençal, which seems rather to show that the etymon contained the sound *p*.

As an alternative which has hitherto remained unnoticed, so far as I am aware, I suggest derivation from the Frankish stem *top*, which according to Diez, followed by Körting, gives Spanish *topar*, Italian

³ Rom. Gram. 2. 448f.

⁴ Op. cit.³

⁵ Op. cit.³

⁶ Et. Wb. d. rom. Sprachen 660 (1887).

intoppare 'to run across', 'to find'. These words are omitted by Meyer-Lübke, perhaps inadvertently, as he acknowledges the derivation of Spanish *topetar* 'to but' from this stem. The sense-development of *topar*, *intoppare* was evidently 'to but against', 'to run across', 'to find'. The etymology which I propose cannot, therefore, be objected to on semantic grounds.

This etymology assumes the metathesized base **tropare* for French and Provençal, while we have developments of the unmetathesized stem in Spanish and Italian. As analogous to this postulation we may cite the Vulgar Latin base **tresaurus*, required to account for French and Catalan reflexes, while the unmetathesized base **tesaurus* has to be assumed in the case of the corresponding Provençal, Spanish, and Italian words. So, too, we have Italian *torchio* 'press' beside French *treuil* 'windlass', Catalan *troh* 'oilpress' < Latin *torculum* beside Vulgar Latin **troculum* 'press'. Likewise, Italian *temperare*, Spanish *templar*, beside French *tremper*, Catalan *trempar*, the Provençal dictionary showing for this word (< Latin *temperare*) both metathesized and unmetathesized forms; It. *tonare*, *tronare*, French *tonner*, Prov. and Span. *tromar* < *tonare*.

When the Latin termination *-are* was added to the Frankish noun-stem **top*, the *p* became *pp* in Italy, remained *p* in Spain, and developed like a Latin intervocalic *p* in French and Provençal. This divergent development was due to borrowing in two different periods. The phonological principle involved has been dealt with systematically by Mackel,⁷ who divides all Germanic loanwords in Romance into two strata, an earlier one containing the words that participated in the Romance sound-shifts, and a later one including those that did not. I will quote a few pertinent examples. While Frankish *skrapan* 'to scrape' shows a Frankish intervocalic *p* undeveloped in Old French *escraper*, in French *buer*, Provençal *bugar* < Frankish *būkon* 'to buck clothes' we have a case of the development of Frankish intervocalic *k* in French and Provençal. Again, Frankish *pauta* 'paw' gives Provençal *pauta*, without development, but Old French *poue*, with development thru *ø*. Mackel⁸ expressly states that in the first stratum of loanwords, intervocalic Germanic *p* becomes *v* in French, and cites Old Low Frankish **skapid* > Old French *eschevi* 'lithe'. Meyer-Lübke⁹ similarly

⁷ Die germanischen Elemente in der französischen und provenzalischen Sprache. Französische Studien 6. 1 (1887).

⁸ Op. cit. 177.

⁹ Op. cit.³

indicates the accepted derivation of Old French *eschevin*, Provençal *escabin* from a Germanic *skapins* 'alderman'.

In the early stratum of loanwords, according to Mackel,¹⁰ free *q* under the main stress becomes in Old French *uo*, *ue*, and remains *q* in Provençal. One example given is Germanic *hōsa* > Old French *huese*, Provençal *qsa* 'trousers'.

Spanish *topetar* 'to but into' evidently postulates a Vulgar Latin **topittare*, with the VL suffix *-ittare*, as a suffix *-etar* can hardly be said to have been living in the Old Spanish period.

I believe Spanish *tropezar* 'to stumble' likewise comes from a VL metathesized type **tropittiare*.

¹⁰ Op. cit. 29.

MISCELLANEA

THE RELATIVE STABILITY OF FIRST AND SECOND SYLLABLES IN AN ARTIFICIAL LANGUAGE

The present paper¹ is an addition to the author's earlier monograph (2) on associative interference, and constitutes an examination of one aspect of the artificial language used in that study.

The technique of studying associative interference in an artificial language was first developed by Esper (1), and has subsequently been adopted by Wolffe. In Wolffe's and in some of Esper's work (1, Experiments I and II) dissyllabic nonsense names were assigned to figures varying in two ways. Esper's figures varied in form and color; Wolffe's in form and size.

In an earlier publication (2) it was reported that with dissyllabic names in which the first syllable designated the size and the second the form of a geometric figure, analogic changes occurred more frequently in the first than in the second syllable. This finding might be attributed to either of two distinct factors. There may be a general tendency toward greater instability in the first than in the second syllable of such names as were used in these studies; or there may be a general tendency toward greater instability in size names than in form names.

In an attempt to evaluate these two explanations the syllable order of the names used in Experiment II of the earlier publication was reversed for all 16 figures. Instead of the name 'small square', to use an English equivalent, the subjects learned to say 'square small'. No other changes were made in either the language or the learning technique. As in the earlier experiments there were four different forms, each occurring in four different sizes. The combination of the appropriate form and size syllables constituted the name of a particular figure. For a description of the technique and the language used see 2.10-16 and 33-5.

Reversing the syllable order did not significantly alter the subjects'

¹ This experiment was performed in the psychology laboratory of the Ohio State University.

responses in any manner; nor did it greatly change the relative frequency of analogic changes in the two syllables. The data on this point are presented in Table 1.

TABLE 1

A comparison of the relative frequency of analogic changes in the first and second syllables of the two languages

	Syllable order	Changes occurring in	
		First syllable	Second syllable
Earlier Exp.	size-form	59.34%	17.87%
Present Exp.	form-size	47.99%	32.56%

This table is to be read as follows: Using the syllable order size-form, 59.34% of all changes occurred in the first syllable, with the second syllable unaltered; 17.87% of all changes occurred in the second syllable with the first one unaltered. The remaining 22.79% of all changes consisted of cases in which the syllable order was reversed, changes were made in both syllables, and so on. The second line of the table presents data for the language in which the syllable order was form-size, and is to be read in the same way.

The percentages of first and second syllable changes as presented in Table 1 indicate that regardless of syllable meaning the second syllable is the more stable, that is, it is changed less frequently than the first syllable. There is also some indication of a tendency for the syllable denoting form to be more stable than the one denoting size. This last difference was, however, of considerably less statistical certainty than the former, and might well be due to chance.

Four names in each language had one sound altered from its systematic form before the beginning of the experiment. Considering only these four unsystematic names—which were more pronouncedly subject to associative interference than any other four names—the tendency toward more frequent change in the first syllable remained unaltered by the change in syllable meaning. The tendency toward greater instability in the syllable denoting size disappeared entirely. (The percentages of changes in the two syllables were respectively 66.51 and 21.79 in the earlier experiment and 64.61 and 23.21 in the present experiment.)

In this connection it may be noted that of these four names, two had a first syllable and two a second syllable sound altered from its system-

atic form. In the *two* names of each experiment in which the first syllable was unsystematic there were 20.17 times as many examples of analogic change in the unsystematic first syllable as in the systematic second syllable. When, in both experiments, the unsystematic sound occurred in the second syllable there were only 1.47 times as many changes in the unsystematic second as in the systematic first syllable. Even under the highly favorable conditions of the inclusion of an unsystematic sound, the second syllable did not show very many more analogic changes than the entirely systematic first syllable. When, however, the two conditions combined—an unsystematic sound in a first syllable—a great many analogic changes developed.

A tabulation of the associative variants listed in Esper's tables (1.32 and 36-7) shows similar results when the two syllables designated respectively color and shape (Experiment I), and when specific sound sequences—but not syllables—designated respectively shape and color (Experiment II). While it is significant that under both of these conditions changes occurred more frequently in the first syllable than in the second, different syllables were used in the two experiments, and in one 'The linguistic elements are not separated by a natural syllable division' (1.17). However, these data support the results of the present experiment in which the above variables were controlled.

In conclusion it may be stated that for the type of dissyllabic names used in the artificial language technique the position of a syllable is of much greater importance than its meaning in determining its stability or instability, and that with this type of linguistic material, changes occur much more frequently in the first syllable than in the second.

DAEL L. WOLFLE.

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NOTES ON OLD NORSE *R*

I. Regarding the Character of Old Norse *R*

The current view that *R* had a palatal *i*-timbre is correct wherever *R*-umlaut appears but it is not correct in the case of the so-called sinking of *i* > *e*, *u* > *o*.

Palatal *R* produced a palatal effect (*R*-umlaut) upon the preceding low vowels (*ā*, *ǣ*; *ō*, *ö*) and upon the high vowels *ū*, *iū*, identical with that of the *i*-, *j*-umlaut (cf. **kaza* > **kaRa* > *ker*, **froRa* > *frør*, **sūR* > *sýr*, **diuza* > **diuR* > *dýr*, etc.). The effect of *R* here was to raise the preceding vowel.

On the other hand, *R* produced the opposite effect upon the preceding high vowels *i* and *u*, in that it *lowered* these vowels to *e* and *o* (with subsequent lengthening), the so-called sinking, parallel to the *a*-umlaut (cf. **miz* > *meR* > *mér*, **fruza* > **froR* > with subsequent palatalization > *frør*, similarly **uz* > **oR* > *or* > *ór* > *ør*—as in *ør-sekr*).

Heusler correctly states¹ that *R* had an *i*-timbre but implies² that it never had an *a*-timbre, which implication is incorrect as applied to the *R* that caused sinking.

R. Iversen explains³ the sinking before *R* as due to the fact that here *R* had lost its palatal character, which statement implies that *R* was here originally palatal.

If Iversen's contention is correct, then original palatal *R* at the time of the sinking assumed an *a*-timbre and then later reassumed its original palatal character (*i*-timbre), for *R*-umlaut took place after the sinking had occurred (cf. **kuRun* > **koRu* > *køro*, **fruRa* > **froR* > *frør*).

There is no reason to assume here that *R* was originally palatal. If it had been, then why had it not already produced palatal (*R*-)umlaut before the time of the sinking (i.e., **fruRa* > **frýr*)? Or if *R* had 'lost' its palatal character before the time of the *R*-umlaut, why should it have reassumed this palatal character?

Tendencies (Sapir's 'drift') are not likely to reverse themselves and the obvious inference in the case of *R* is that the tendency was from guttural to palatal, for there is no evidence that the *R* ever was palatal before the time of the sinking.

Both Heusler and Iversen are here led astray by the erroneous assumption that *R* was originally palatal (*i*-timbre). The solution to the

¹ Heusler, Aisl. Elementarb². § 144: 'Dieser jüngere *r*-Laut muss, da er dunkle Vokale palatalisiert hat, "*i*-Farbe" gehabt haben, d.h. der Zungenrücken muss dem harten Gaumen genähert gewesen sein. Diese Stellung ist möglich, wenn die Zungenspitze ganz vorn, post-dental, vibriert; das ältere "dunklere" *r* war supradental'.

² Heusler, § 144, Anm.: 'Die übliche Bezeichnung des *R* als "palatal" weckt die Vorstellung, die Zungenspitze vibriere am harten Gaumen (was man sonst kakuminal nennt): dies wäre ein ganz dunkles, *a*-färbiges *r*'.

³ R. Iversen, Norrœn Gr. § 26, Anm.: 'Forutsetningen for disse vokaloverganger må være at *R* på denne tid (slutten av 900-tallet) hadde tapt sin palatalitet'.

problem is clear if we assume⁴ that *R* originally had an *a*-timbre which later assumed an *i*-timbre. The original *a*-timbre was preserved only where the vowels *i* and *u* preceded (i.e., sinking). From the example of the type **fruRa* > **froR* > *frør* it is self-evident that the sinking occurred before the time of the palatalization; hence the *R*-umlaut, e.g., in **glaRa* > *gler*, **māR* > *mær* must have taken place at a time subsequent to **fruRa* > **froR*.

Traces of this early sinking of *u* > *o* and *i* > *e* before *R* are still found in (WGerm.) OE⁵ (cf. OE *or-*, *tor-* with ON *ór*, *ør-*, *tor-* < **uz*, **tuz* and OE *mē*, *dē* with ON *mér*, *þér* < **miz*, **þiz*).

Whether PWGerm. *z* already possessed an *a*-timbre, as Behaghel (see footnote 4) infers, is not at all certain, for in Goth. *mīzdō* > OE *mēd*, OS *mēda*, OHG *mēta*, *z* may have become *R*⁶ before it was lost; thus not **mezda* > OE *mēd* but **mezda* > **meRda* > OE *mēd*. The latter development seems the more likely because the Goth. *z* shows no signs of *a*-timbre and because elsewhere *z* had become *R* where sinking occurred. The loss of *R* before *d* is not harder to account for than the loss of *z* before *d*⁷.

The fact that in WGerm. comparatively few traces of sinking before *r* (< *R*) occur, indicates that *R* in WGerm. had begun to assume the *i*-timbre which later prevailed in ON.

The development of PG *z* in North and West Germ. was therefore most probably *z* > *R* (guttural, *a*-timbre) > *R* (palatal, *i*-timbre, causing *R*-umlaut) > *r* (supradental).

This development is in keeping with the tendency for *R* gradually to approach original *r* with which it finally became identical, i.e., the tip of the tongue (which vibrated on the hard plate, *a*-timbre) gradually approached the dental position, first post dental (*i*-timbre) and then finally supradental (= *r*). Here we have then a consistent development in keeping with the principle of Sapir's 'drift'.

⁴ Cf. O. Behaghel, Germ. 31. 381: 'Die Neigung des *z* zur *a*-Farbe scheint schon im Gemeingermanischen begonnen zu haben; denn auch im Nordischen geht jener dem *i* verwandten Wirkung des *z* (*R*) eine dem *a* verwandte voraus.'

⁵ Cf. E. Sievers, Zum ags. Vocalismus 33; O. Behaghel, loc. cit.

⁶ Cf. F. Kluge, Urgerm. § 123, Anm. 3: 'Vor dem aus *R* = *z* entstandenen *r* zeigt umgekehrt das Angelsächs. *a*-Brechung...; vgl. auch angl. *mēd* 'Lohn' für **meRd* = gr. *μισθός*...'

⁷ Cf. the assimilation of **zd* > *dd* in ON; Goth. *razda* > ON *rōdd*. It cannot be shown that this assimilation took place before the time when *z* became *R*. The development may have been **zd* > **Rd* > *dd* (cf. Heusler § 146. 1).

If **zd* became **Rd* (> *dd*) in ON we may assume **zd* (with loss of *R*) in WGerm.

II. Regarding the Lengthening $\text{ǣ} > \text{ē} > \text{ē}$, $\text{ǣ} > \text{ō} > \text{ō}$: ǣ before r in Old Norse.

No one has yet attempted to explain the reason for this lengthening. The explanation which I offer here must, in the nature of things, be purely theoretical and tentative.

Altho the runic inscriptions do not distinguish between long and short e (cf. *meR* Opedal) we may assume that the sinking occurred before the time of the lengthening, as in the Goth. sinking of $\text{ǣ} > \text{ē}$ before original r (cf. *batran* with runic *meR*). That the sinking had nothing to do with the lengthening is supported by the fact that lengthening took place without sinking occasionally in Old Icelandic (cf. $\text{*}uz > \text{*}uR > \text{úr}$) and always in Old Guthic (cf. *mīr*, *sīr*, etc.).

The lengthening regularly took place in accented monosyllabic words, where R belonged to the same syllable as the preceding vowel (cf. $\text{*}mǣz > \text{mēr} > \text{mēr}$, $\text{*}sǣz > \text{*}sēR > \text{sér}$, $\text{*}ǣz > \text{ōR} > \text{ór:ǫr}$).

The lengthening did not take place either in words of more than one syllable, where R belonged to the syllable following the vowel in question (cf. $\text{*}kǣRun > \text{*}kōru > \text{*}kǫro$), or in unaccented syllables (cf. the unaccented prefix $\text{*}ǣz- > \text{*}ōR > \text{ǫr} > \text{ǫr}$).

Monosyllabic forms like *gler* (< $\text{*}glaRa$), *frǫr* (< $\text{*}froRa$) with short vowel may be explained as due to analogy with the dissyllabic forms (cf. *glere* : *frere*, dat. sing. etc.).

We see therefore that the lengthening depended upon two factors, viz. the presence of R and the expiratory accent.

Since the lengthening occurred after the time of the sinking, R at the time of the lengthening must have been a post-dental vibrating sound with i -timbre (causing palatal R -umlaut, cf. $\text{*}ōR < \text{ór} : \text{ǫr}$). I assume that in pronouncing a vibrating liquid a prosthetic slurred vowel sound (ə) was generated (ər-r) which united with the preceding vowel and thus lengthened it (cf. $\text{*}mēR > \text{*}mē/\text{ə}R > \text{mēr}$, $\text{*}ōR > \text{*}o/\text{ə}R > \text{ór}$).

So long as the breath stream was kept undivided upon the preceding vowel, the slurred vowel before R persisted (with consequent lengthening). But if the breath stream was released towards the next syllable or if the preceding vowel was unaccented, the breath stream was not strong enough to generate the slurred vowel, hence no lengthening took place (cf. $\text{*}kǣRun > \text{kōRu} > \text{kǫru}$, *ǫr-sékr*).

I consider this lengthening of $\text{ǣ} > \text{ē}$ and $\text{ō} > \text{ō}$ before R as an earlier manifestation of the same process as took place much later in the case of l , n , and r plus a consonant.

Cacuminal l plus a consonant (f , g , k , p) lengthened the preceding

vowels *a*, *o*, *q*, *u* (cf. *hjálpa*, *fólk*, *hjólþ*, *úlfr*, etc.). Similarly *a* was lengthened before *ng* and *nk* (cf. *lángur*, *kránkr*) and in ONorw. before *rd*, *rt* and *rn* (cf. *bárn*, etc.).

OE (which in common with ON suffered the change *i* > *e* and *u* > *o* before *R*, cf. *mēR* > *mē*, **toR* > *tor*) likewise shows lengthening of the short vowel preceding *l*, *n*, and *r* plus a consonant⁸ and without any restrictions such as characterized the ON (cf. *áld*, *hánd*, *hōnd*, *sēdan*, *árn*, *wórd*, etc.).

My theory is that here too the sonant nature of the liquids and nasals (*l*, *n*, *r*) resulted in a prosthetic blurred vowel sound which caused the lengthening of the preceding vowel (cf. **fō/əlk* > *fólk*, just as **ō/əR* > *ór*).

Just as in the case of *ě* > *ē* and *ō* > *ō* before *R*, so in the case of short vowels before *l*, *n*, *r* the expiratory accent must have favored the lengthening, for we do not find this secondary lengthening in unaccented syllables even if (contrary to the primary lengthening before *R*) we do find it in dissyllabic words (cf. ON *hjálpa*, OE *milde*, etc.).

The question remains as to why *R* should have possessed this blurred, prosthetic vowel at a time when apparently none of the liquids (*l*, *r*) or nasals (*m*, *n*) possessed⁹ it, i.e., in the preliterate era. The only answer to this question seems to me to be that the *vibratory character* of *R* was conducive to sonantization. The rapid periodic interruption of the breath required a continual repetition of the vowel sound.

Evidently *R* passed over into *r* at an earlier period in WGerm. than in ON, for in WGerm there is no evidence of vowel lengthening due to *R*. Examples of the type OE *ór*-, *tór*- are due to secondary lengthening¹⁰ which could take place in any monosyllabic word before a single consonant (cf. *bēt*:*bét*, *gíf*:*gíf*, etc.).

ALBERT MOREY STURTEVANT.

⁸ Cf. Sievers, *Angs. Gr.* § 124.

⁹ Except in combination with another consonant, i.e., a svarabhakti vowel.

In support of the view that *R* possessed this prosthetic, slurred vowel but *r* did not until later, is the fact that the *Cod. Holm.* 34. 4° has a svarabhakti vowel only before *r* < *R* but never before original *r* (cf. *eter* but *akr*, etc.); see Noreen § 161, Anm. 1.

¹⁰ Cf. Sievers § 122.

BOOK REVIEWS

Saka Studies. Pp. vii + 198. By STEN KONOW. Oslo Etnografiske Museum, Bulletin 5. Oslo, 1932.

The book contains an edition of 'the middle-Iranian version of the [Buddhistic] *Samghāṣūtra*', in the so-called 'Saka' language but in Roman letters, with transliterated Tibetan text and English translation, all in horizontally parallel sections on the same page. In addition there is a full treatment of the grammar of the language, and a complete vocabulary.

The entire work is characterized by the clarity, intelligence, and learning which mark all of Professor Konow's work, and will doubtless stand for years to come as the definitive book on this interesting and hitherto obscure language. The author discusses, in his introduction, the name of the language (showing that, while 'Saka' is perhaps not the most appropriate name, it is at least defensible, the language being undoubtedly 'Scythian'), and its linguistic relationships, as to which he considers it settled that it is an East Iranian dialect, rejecting Leumann's view that it belonged to a separate branch of the Aryan family, different from both Iranian and Indic. All specialists now agree with him in this; and the name 'Saka' is well established and convenient, and is justifiable on the ground that the 'Sakas' known to the Hindus seem probably to have spoken this language. I would only suggest that to say that the language is 'Scythian' seems a little dangerous. To some it might suggest a closer relationship with the language of the ancient 'Scythians' of the region of the Black Sea. That language (of which Ossetic seems to be a fairly close modern representative) was surely much closer to Sogdian than to 'Saka', of which the Pamir dialects may be called the modern representatives.

His treatment of the sounds in relation to the alphabet is elaborate, as the conditions demand. The Indian alphabet in which the texts were written was ill adapted to the language, and many makeshifts had to be adopted, such as, to mention one example, the writing of *ys* for the sound of (English) *z*, which did not exist in Indian languages. Not all of the intentions of the writers are as clear as this one, but the subject is linguistically extremely interesting, and what Konow says on it is

always highly intelligent and usually convincing. The numerous Indian loanwords which (naturally, the work being Buddhistic) occur in the text are of great assistance in determining the values assigned to the various letters.

Equally good is the treatment of the grammatical forms of the language, and the edition of the text itself, which includes all known fragments of the *Samghātasūtra*. The vocabulary not only contains all words occurring in this text, but also many found in documents in the same language published by Hoernle and others. It is thus a reasonably complete dictionary of the language as we now know it. The author modestly calls it not 'an etymological dictionary, but a grammatical index'; yet etymological notes are also included and are in general quite sufficient to suggest to scholars the relationships of the words.

Some of the fragments had already been published by Leumann; the rest are here published for the first time from manuscript leaves obtained by Sir George Macartney while he was acting as British Consul General in Chinese Turkestan. To him the book is dedicated. We are glad that Professor Konow departed from his original intention of publishing only those fragments which are new, and included a reprint of the Leumann fragments; partly because there was some duplication in the two sets of fragments, and Konow has been able to furnish some variants to the text of Leumann, and also because it is much better to have all that we possess of the text printed in one place.

Professor Konow departs from standard usage in one very minor matter, which arouses one's curiosity: the sign > to him means 'derived from', whereas to most of us it has the opposite meaning. Since he is quite consistent in this respect, no misunderstandings can be caused by it.

FRANKLIN EDGERTON

Prākṛta-Prakāśa of Vararuci, with Bhāmaha's Commentary Manoramā. Edited with Translation, Introduction, Glossary etc. By DR. P. L. VAIDYA. . . , Professor of Sanskrit and allied Languages, Fergusson College, Poona. 1931. xiv + 156 pp.

An Introduction to the Comparative Philology of Indo-Aryan Languages. By R. V. JAHAGIRDAR. 1932. iv + 166 pp.

A Manual of Pāli (Being a Graduated Course of Pāli for Beginners). By C. V. JOSHI, M.A. 2d. ed. 1931. vi + 152 pp.

All three published by the Oriental Book Agency, Poona.

All three of these booklets are primarily textbooks for the use of col-

lege students in India. The only one which could possibly claim any usefulness for scholars is the first. Even it has little originality, being (as the author says) only a reworking of Cowell's edition and translation (2d ed., London, 1868). Since Cowell is practically unobtainable, and since Vararuci is our oldest grammar of Prakrit and therefore important, the work was worth doing, and it seems to have been done competently, within the limits set by the author. Its usefulness would have been greatly increased if the sketch of Prakrit grammar given in the Introduction had not been restricted to a rehash of Cowell, whose treatment is now quite antiquated. Professor Vaidya gives no evidence of having used the monumental work of Pischel, except that he quotes from it in his list of Prakrit grammarians. The 'translation' would be largely unintelligible to one unfamiliar with the technical lingo of Indian grammarians. For example, 11.9 *asmadah̐ saṁ hake hage ahake* is rendered 'For *asmad*, followed by *su*, *hake*, *hage*, and *ahake* are substitutes.' The real meaning is: 'The nominative singular of the first personal pronoun is *hake*, *hage*, or *ahake* (instead of *aham*)'. Of course Professor Vaidya knows this; but why not say it, in professing to 'translate' the passage into English?—Misprints and errors are commendably rare.

Mr. Jahagirdar has attempted to give Indian students an introduction to Indo-European comparative grammar, and even in a measure to general linguistics, as a background for the 'comparative philology of Indo-Aryan languages'. The intention was laudable; I regret to have to say that the result seems to me a failure. The book is rambling, naïve, and muddled; the quotations of Indo-European etymologies are often hair-raising. No doubt many, but certainly by no means all, of the verbal atrocities are misprints. So much space is given to this 'background' that the professed subject of the book comes off very scantily. The badly needed 'introduction to the comparative philology of [the modern] Indo-Aryan languages' remains to be written.

Mr. Joshi's book is a kind of 'primer', with 'exercises' for translation (Pāli-English and English-Pāli), vocabularies to each 'lesson', etc. As to the usefulness of this method with such a language as Pāli, opinions may differ; my own is very sceptical, especially considering the fact that students are expected by Mr. Joshi to know Sanskrit, which would imply some maturity. There are more serious objections to the book. The author does not appear to know the modern scholarly literature on Pāli grammar. If he knew even Geiger's standard work, he has given no evidence of the fact. Nor is he at home in modern linguistic methods. Witness such statements as this: 'The visarga is changed to *u* after

*a'*¹ (p. 4; what he means is that Sanskrit final *aḥ* [as] appears in Pāli as *o*, with generalization of the sandhi form before sonant consonants). Grammatically he rests mainly on the ancient Indian grammarians, Sanskrit and Pāli. That a knowledge of them is highly desirable I should be the last to deny; but in this day we cannot swallow them whole.

FRANKLIN EDGERTON

Zur Frage vom 'inneren' Wert der Klauseln in der Späten Lateinischen Prosa. Pp. 20. By SVEN LILLIEDAHL. Linköping, A.-B. Östgöta Correspondentens Boktryckeri, 1932.

The author of this monograph, following up his *Florusstudien* (1928), has here analysed the clausulae in *Panegyricus Incerti* (Baehrens, 220 ff.) and *Nazarius* (ib. 156 ff.), not only those at the close of periods, but also those at weaker pauses. So far as I can find, he has collected all occurrences of the three chief types and their subdivisions, and enumerated accurately the percentages in which they occur. There is full illustration of rhythmical and 'unrhythmical' endings (with a wise caution against rash 'emendation' of the latter); the difference between classical and late Latin preferences is noted; and some attempt is made to appreciate the niceties of feeling in the matter of clausulae which the *panegyrici* show. But it is to be remembered that Lilliedahl has dealt exclusively with two authors of special rhetorical training and bias, to whose writing Cicero's remark (*numerus oratorium necessitate ipsa efficiunt etiam sine industria*) does not apply. It is the artificially cultivated language of the orator, not the ready utterance of extempore speech that they represent.

J. W.

Speculum Christiani; A Middle English Religious Treatise of the 14th Century. Pp. ccv + 241. By GUSTAF HOLMSTEDT. Oxford 1930.

This once widely read work has been splendidly edited from all extant MSS. (66), together with a most exhaustive introduction and critical notes. The completed work will contain a glossary.

The first part of the introduction (xv-clxxiv) consists principally of a

¹ The theory was held by Bopp, see Wackernagel, *AIG* I 338. In essence it goes back to Pāṇini 6. 1. 113; but Pāṇini, of course, intended only a mechanical rule. Perhaps Mr. Joshi had the same intention; but more may be expected of a writer of this day.

description of the MSS. and their relation to each other both individually and in groups. The language of each MS. is briefly discussed. Then the MSS. that are grouped together on the basis of internal evidence such as the omission or insertion of elements foreign to the other groups are briefly characterized as to dialect and probable provenance. The second part of the introduction (clxxv-clxxx) is taken up with a discussion of the date and authorship. Holmstedt establishes his approximate terminus ab quo for the original 'Speculum' by a quotation from Richard Rolle of Hampole who died in 1349. His terminus ad quem he puts 'considerably earlier than 1400', since 'by about 1400 or a little later the MSS. had become very numerous and widely spread, and so diversified that they had fallen into at least four different groups' and 'some considerable time must have elapsed to allow for the introduction and circulation of the many variant readings'. Holmstedt thus disagrees with Carleton Brown (*Modern Lang. Notes* 31. 223-6), who maintains 'that the "Speculum Christiani" cannot have been composed earlier than the last decade of the fourteenth century'.

The question of authorship is quickly disposed of. Holmstedt shows that the names that have come down to us in the colophons of seven MSS. are those of scribes or copyists. He concludes as follows:

In all probability the name of the real author will remain unknown. He was without doubt a cleric and he was probably a Franciscan, since some parts of the work are directly based upon the *Constitutiones* of John Peckham, who was a Franciscan.

There can be little doubt that

The 'Speculum' was written for the clergy to be used by them as a kind of manual when instructing or preaching to the people. The contents are divided into eight tabulae, preceded by a kind of prologue, which deals with the difference between preaching and teaching, with ignorance, with different kinds of almsgiving, and with the clergy.

The tabulae treat of the Ten Commandments, the Seven Principal Virtues, the Seven Deadly Sins, etc. This part of the introduction, (clxxx-ccii) which deals with the composition and contents, is in the reviewer's opinion particularly well done. The author clearly shows that both the Latin and the English parts of the 'Speculum' are compilations from various sources.

The second half of the book (2-241) gives the texts with variant readings. The Harley MS. 6580 (Brit. Mus.) is the 'basic text for the English version because it is the only MS. that is entirely in English'.

For the Latin version, Lansdowne 344 (Brit. Mus.), has been chosen, 'because of the MSS. now known it is the most nearly related to Harley 6580, since both are derived from the same source'. These texts are printed parallel on opposite pages. Of the various readings of the English portions in all the MSS. only such are given 'as bear on grammar and dialect'.

In conclusion I wish to state that this dissertation is a distinct contribution to the study of late Middle English. Altho I should personally have ventured, especially in the sections devoted to the dialect, a more outspoken opinion, I feel that the author has about exhausted his subject in its manifold ramifications.

EDWARD H. SEHRT

Norsk Språkhistorie til omkring 1370. Pp. xvi + 388. By DIDRIK ARUP SEIP. Oslo: H. Aschehoug & Co., 1931.

In 1921 Adolf Noreen expressed regret that no thorough account of ancient Norse was to be found, because Old Norse and Old Icelandic had almost always been treated together. It is therefore a distinct advance in the history of Old Norse to have a work covering exclusively all three of the principal dialect provinces in Norway by a native scholar. Although Professor Seip has contributed a briefer work in this field, his latest contribution is the first thoroughgoing history of Old Norse per se.

The divisions of the present volume are as follows: 1. Introduction [Indo-European classifications], 2. Germanic Languages, 3. Primitive Norse till the Sixth Century, 4. The Period of Syncopation, 5. The Viking Period (c. 800 to c. 1050), 6. The Oldest Old Norse (1050-1200), 7. The Thirteenth Century, and 8. From Old to Middle Norse (1300-1370).

A summary of the chapter on The Viking Period will indicate the character of the whole book. The author first gives the general character of the language of this period, indicating the extent and causes of word expansion, and the dialect differences which later grew into the several Scandinavian languages. Norwegian, Swedish, and Danish are first recognizable as separate dialects in this period. The phenomenon of the suffixed article, though it is known from the writings of former times, must have been developed colloquially during the tenth century. The reflexive form of the pronoun came up in this period. The vocabulary spread wherever the Vikings went, and loanwords came into Norse in quantities. Contrary to the opinion that a more rapid rate of utterance during this period led to many contractions, the runic

finds show that the language got its new character before the Viking period. (Cf. Guðmundur Finnbogason, 'Die Ursachen des Lautveränderungen im Isländischen', *ZfdPh.* 54. 2.)

The suffixed article, common to Norse (except west and south Jutlandish), arose at a time and for a reason not surely known. The older form *enn*, *inn*, identified by Kock with Goth. *jains*, Prim. Norse **jainaR*, later, Kock supposes, blended with the pronoun stem *hi* (known from Goth. *himma*, etc.) to give the pronoun *hinn*. Or Norse had a pronoun **hinaR*, which in unaccented position could give *enn* or *inn*. As early as 1837 James Grimm explained the form *karlinn* as arising from *karl inn gamli*, in which the article belonged to the adjective, an opinion retained by Delbrück, Kock, and Falk and Torp. Opposed is the belief of M. Nygaard that the article, like the other demonstrative pronoun (*sá*, *þessi*), readily followed the substantive to which it belonged when it was not emphasized by being stressed. Professor Seip explains that these two opinions can be telescoped, since the article can have got fixed to the preceding substantive both when it, unaccompanied by an adjective, followed the substantive as a demonstrative pronoun, and when it belonged to the adjective, as for example in *ormr enn gamle*. 'In any event', concludes Professor Seip, 'the coalescence is due to accent'.

The reflexive pronoun may have been in use in skaldic verse before 900, since it is found in Danish runic inscriptions from c. 1000 (*barþusk*, *kuask*), and is known also from Swedish runic inscriptions. It is most reasonable to suppose that the form in *-s*, contradistinct to that in *-sk*, explains Professor Seip, developed from *kallask* with the falling away of *k* when such a pronoun as *þu* or *þeir* followed the verb. Perhaps some forms in *-s* are due to the verbs which control them: *hjalpa sér* could become *hjalpas*, and compare such enclitic forms of the pronoun *ek* as *emk* and *mæltak*. The reflexive form in *-z*, which arose when the verbal form originally ended in *-ð*, is explained by the sound change *ð > t* before unvoiced consonants (*ts* was oftenest written *z*: *firrizk*).

It is not known when the northerners learned the Latin alphabet, says Professor Seip, but many of them learned it on Viking raids to foreign lands. Those who settled in England and Ireland knew it as early as the ninth century. Apparently by the second half of the eleventh century the Norsemen could write the vernacular with the Latin alphabet. The oldest written document in Norwegian is one hundred years older than the oldest in Swedish, and still older than the

oldest in Danish. To Denmark and Sweden the art of writing came mainly from Germany; Norway and Iceland learned it from England, where the vernacular was early used along with Latin. Perhaps the rune-cutter knew the Latin alphabet in the Old English form.

The rise of the Hanseatic agency brought German culture to Norway. Professor Seip says that from 1050 to 1200 the greater number of words was domestic. Loanwords came in more and more, especially English and Low German. Many of the loans from or through English can well be older than 1200, but most of those from and through Middle Low German came in after 1200. Since it was at the end of the twelfth century when the Germans first began to do business in Norway, the colloquial speech took in many Middle Low German words in the thirteenth century.

In the oldest Old Norse period (1050-1200) the nominative *-r* was occasionally written in the dative, an evidence that it was already beginning to fall in certain dialects. After 1300 *-r* drops more regularly.

East Norse and West Norse were the main dialect divisions in ancient Norway. Bergen became important linguistically, because there met the various western dialects—those of the north-west with vowel harmony; those of the south-west without. In 1286 Oslo first became the capital. It was then the metropolis and the speech center of Norway. From that time eastland speech patterns began to work out over the whole country from Oslo. At the same time, the influence of the Trøndelag began to diminish. Cacuminal *l* seems to have arisen in East Norse, and progressive *j*-umlaut is essentially East Norse.

In the period from 1300 to 1370 double vowels sometimes seem to show that the vowel is long. Double consonants often indicate that the consonant is long, but sometimes they seem to show that the preceding vowel is short—a device practised by Orm in 1200.

This work contains a good many innocent missprints, not all of them noted in '*rettelser og tillegg*'. It has a poor mechanical arrangement of matter. The volume ought to be made more generally available by suitable translation. It is to be hoped that Professor Seip will bring the work up to the present in an additional volume, including a discussion of the current language complication in Norway. A History of the Vikings, by T. D. Kendrick, New York, 1930, and Norsk Grammatik, by Leiv Hegstad, Oslo, 1931, might well be added to the bibliographies.

J. H. JACKSON

Litauische Dialektstudien. Pp. lv + 110. By GEORG GERULLIS. With 8 X-ray pictures and 20 cymographs. Leipzig: Markert und Petters Verlag, 1930. (Slavisch-Baltische Quellen und Forschungen 5.)

This publication consists of an introduction (55 pages) and a collection of dialect texts (106 pages). The introductory part explains first of all the cause and aim of this study: the author wishes to stimulate investigations of the Lithuanian dialects and to lay a sound basis for such investigations by establishing the necessary transcription. Pages 21-55 of the introduction are devoted to problems of the Lithuanian accent. Detailed descriptions of the following accents are presented: Kurzton (grave), Stosston (acute), Dehnton (circumflex), Brehton, Mittelton, Geschnittener Dehnton. Gerullis' description of the Lithuanian accents is based both on instrumental experiments and on expert personal observation. Therefore, all further investigators of the Lithuanian accent will have to start from the basis laid in this work.

The texts given in the second part of the book consist of a specimen of standard literary Lithuanian, as it was spoken by the late Jonas Jablonskis (the creator of modern standard Lithuanian representing more or less the dialect of the older generation of Naumiestis near the Lithuanian-German border), and of examples of ten most representative dialects. Every dialect represented here received a thorough phonetic characterization. Most of the dialect texts have been taken from the texts collected half a century ago by Bishop Anthony Baranowski and edited by Specht (*Litauische Mundarten. Gesammelt von A. Baranowski. Bd. I: Texte. Aus dem Weberschen Nachlass herausgegeben von Dr. Franz Specht. Leipzig: K. F. Koehler, 1920*).

In the year 1926 I gave my students at the University of Kaunas (Lithuania) an introduction to the study of dialects. For that purpose we checked on various texts from Baranowski's collection. By doing so we found innumerable discrepancies from the actual present local speech. These differences were mostly of phonetic character, but there were also interesting syntactical and lexical differences.

The annotations in my copy of Specht's edition show that Gerullis has taken great pains to establish a reliable text. Let us compare the text from Joniškėlis (Specht I 153 f.) with Gerullis 61-63. Almost all the phonetic differences shown by Gerullis' text are corroborated by my own notes. My notes differ only in one case: instead of Baranowski's form *wienakart* I have *vieno kārto*, while Gerullis has *vienokart*. This may easily be a mistake of mine, and the slightness of the deviation indicates the similarity of the results of our observations.

One disagreeable feature in this publication is the highly offensive self-confidence of the author. He has apparently forgotten that every branch of knowledge has to be built up gradually by means of friendly cooperation. Even if previous attempts have not been of the high standard shown in this study it would seem that Gerullis might be more lenient with the shortcomings of other scholars whose studies have at any rate helped to prepare the ground.

ALFRED SENN

Traité de Grammaire Hébraïque. Pp. 432. By MAYER LAMBERT. Paris, Librairie Ernest Leroux, 1931-32.

This grammar, of which the syntax is apparently still to appear, is the work of a distinguished French Hebraist, and presents a survey of the phonology and morphology of Hebrew. It does not, however, offer anything particularly novel either in material or arrangement.

After a brief prefatory statement, an introduction (1-6) dealing with the speech family, name, and development of Hebrew, and a discussion of the phonetic value of the Hebrew written signs, bearing the incongruous title of 'Semasiologie' (7-36), the author treats the Phonology (37-66), and the Morphology of the Noun, Adjective, and Pronoun, in the following arrangement: roots (67-70); gender (70-9); number (79-93); determination and indetermination (93-9); absolute and construct states (99-109); apposition (109-111); inflection (111-6); adjectives (116-20); demonstratives (121-3); interrogative pronouns (124-8); relatives (128-36); independent personal pronouns (136-9); suffixes (139-48); pronominal substantives (148-9); noun formations (149-211); numerals (211-24).

This is followed by a discussion of the Morphology of the Verb and the Particles. The material on the verb is arranged as follows: conjugations (225-38); tense and mode forms (238-71; perfect, future, future and perfect consecutives, imperative and future imperative, infinitive, participles); inflection (271-7); observations on the conjugations (277-300: Qal, Passive Qal, Nifal, Piel and Pual, Hifil and Hofal, Hith-pael, rare conjugations); pronominal suffixes (300-11); irregular verbs (311-87: 1st, 2nd, and 3rd guttural; *lamed-aleph*, *pe-nun*, *ain-ain*, *pe-waw-yod*, *ain-waw-yod*, *lamed-waw-yod*; doubly and trebly irregular). The discussion of particles falls into the following divisions: adverbs (388-403), prepositions (403-20); conjunctions (420-32); interjections (432-end).

The phonological material is defective, and far below the standard

set by such German scholars as Brockelmann in his *Grundriss d. vergleichenden Grammatik d. semitischen Sprachen*, Bd. I, Berlin, 1908 and his *Syrische Grammatik* (Berlin, 1912), and Bergsträsser, and Bauer and Leander in their Hebrew grammars (Bergsträsser, Leipzig, 1918; Bauer u. Leander, Halle, 1918). The description of the pronunciation of the Hebrew signs in the 'Semasiologie' is often inaccurate or incorrect. For example the pronunciation of '(Aleph) is said to be 'un souffle léger, presque imperceptible à l'oreille moderne'; that of '(Ain), 'un aspiration forte et sèche'; that of *h*, 'l'aspiration la plus forte'; that of the emphatics, according to the author, 'équivalent à une sorte de combinaison des sons *t, s, k* avec un '(Ain)'. In the discussion of the phonetic meaning of Shewa, the author retains as a distinct category the discredited *shewa medium* which is of course only a case of *Shewa quiescens*. The Phonology is practically a repetition of the unsatisfactory material in the editions of Gesenius' *Hebräische Grammatik* before that edited by Bergsträsser.

In the morphology, the treatment of roots (67-70), the exposition of the nominal types (152-78), and the discussion of the interrelation of nominal and verbal forms (272 f.) are unsatisfactory, being marked by artificiality and unwarranted assumptions, as illustrated by the following excerpts: 67—d'autres mots . . . n'ont pas de racine (he means the particles, interjectional, adverbial, pronominal); 68—les racines trilitères proviennent de racines antérieures qui avaient deux consonnes (this holds of some trilateral roots, but there is no evidence that it is true in the case of all); 150—les formes *pa'il* et *pa'ul* paraissent venir elles-mêmes de *pa'l* et avoir reçu un voyelle secondaire par analogie avec *pa'al*. S'il en est ainsi, *kabed*, et *ikkbad* auraient au fond la même thème (avec déplacement de la voyelle); 272—le futur *qi-qšor*, *qi-kbad*, l'impératif *qšor*, *kbad*, et l'infinitif second *qšor* appartient au type 1 (= le type univocalique).

The material of the grammar is broken up into a number of logical divisions and subdivisions, but the way in which the material throughout the book is divided into isolated numbered paragraphs, each one apparently coordinate with every other, does not permit a ready realization of the logical arrangement, and to that extent obscures the plan of the work.

On the whole, however, in spite of defects in its scientific character and physical make up, such as those exemplified above, the work constitutes a fairly good descriptive grammar of Hebrew phonology and morphology, and some of its sections are especially to be commended.

Such are, for example, the discussion of number forms (79 ff.); retrospective pronouns in relative clauses (130-1); the reflexive idea (140 f.); classes of nouns with pronominal suffixes (184-211); verbs doubly and triply irregular (377-87).

The author's discussion of the Syntax, which is apparently to follow, will be awaited with interest, as here there is every opportunity for the production of a treatise of outstanding importance, there being as yet no satisfactory Hebrew syntax that at all approaches completeness.

FRANK R. BLAKE

NOTES AND PERSONALIA

RAYMOND PHILIP DOUGHERTY, distinguished Assyriologist of Yale University, and a Foundation Member of the LINGUISTIC SOCIETY OF AMERICA, died suddenly at New Haven, Connecticut, on July 14, 1933, in the fifty-sixth year of his age.

He was born at Lebanon, Pa., on August 5, 1877, and was educated at Lebanon Valley College, where he received the degrees of A.B. and A.M. in 1897 and 1903, and at Bonebrake Theological Seminary (Dayton, Ohio), where he received the B.D. in 1910. He taught in the Leander Clark College (Toledo, Iowa) 1900-02, was ordained to the ministry of the United Brethren in Christ in 1904, and was principal of the Albert Academy at Freetown, Sierra Leone, 1904-14, during part of which time he was also Vice-Consul of the United States at that place. He then returned to this country and pursued graduate studies at Yale University, receiving the degree of Ph.D. in 1918. Thereafter he was Professor of Biblical Literature at Goucher College until 1926, when he was called back to Yale University as Laffan Professor of Assyriology and Babylonian Literature and Curator of the Babylonian Collection, in succession upon his former teacher, the late Albert T. Clay. He was a member of many learned societies in this country, and the author of a number of volumes on Biblical and Assyriological subjects. In 1925-26 he was Annual Professor at the American Schools of Oriental Research in Jerusalem and Baghdad, when he conducted an archaeological survey of Southern Babylonia. His sudden death is a great sorrow to his friends as well as a heavy blow to American scholarship in the Near Eastern field.

ARTHUR RINGGOLD SPENCER, a Foundation Member of the LINGUISTIC SOCIETY OF AMERICA, died suddenly at his home in Villanova, Pa., on May 12, 1933, in the fifty-seventh year of his age.

He was a Philadelphian by birth, and was educated at the University of Pennsylvania, where he received the degree of A.B. in 1899 and that of LL.B. in 1903. In 1922 he became Assistant to the Dean of the College of the University of Pennsylvania, where his kindly and sympathetic nature endeared him alike to his administrative asso-

ciates and to the students who brought their difficulties to him for adjustment. In 1931 he gave up this position on account of failing health, and from then on he lived in retirement until his death.

He took a keen interest in literature and the fine arts, and was an enthusiastic member of the Linguistic Society from the time of its foundation, becoming one of the Trustees of its Endowment Fund. Although he was not a professional scholar, he read many of its publications as well as publications of other societies in the classical languages, and discussed them with his friends in a manner which showed understanding and appreciation, and a deep sympathy with the aims of scholarly research.

MERLE M. ODGERS, Assistant Professor of Latin in the University of Pennsylvania and a Foundation Member of the LINGUISTIC SOCIETY, has been appointed by the Executive Committee to be one of the Trustees of the Endowment Fund of the Society, succeeding the late Arthur R. Spencer. Dr. Odgers also recently became the first Dean of the new College of Liberal Arts for Women, in the University of Pennsylvania.

ALOIS R. NYKL, during his recent extended period of research abroad, has written three volumes, all bearing on the linguistic and literary aspects of the formation of Troubadour poetry about 1100 A.D.:

The Dove's Neck-Ring, 366 pp., published by Paul Geuthner, 22 rue Jacob, Paris VI.

Kitāb az-Zahra, 424 pp., published by the University of Chicago Press.

El Cancionero de Aben Guzmán, 524 pp., published by the Escuela de Estudios Árabes, 60 Calle de San Vicente, Madrid.

THE FOLLOWING NEW MEMBERS FOR 1933 have been received into the LINGUISTIC SOCIETY subsequent to the last published list, and up to September 26, 1933:

Dr. Don Cameron Allen, 406 Campus Ave., Pullman, Wash.; Instructor in English, State College of Washington.

Mr. Robert W. Cope, 559 Ninth Ave., Prospect Park, Del. Co., Pa.; graduate student in Latin, Univ. of Pennsylvania.

Miss Martha Jane Gibson, 301 Prospect St., New Haven, Conn.; Honorary Fellow in English, Yale Univ.

BOOKS RECEIVED

Under this heading will be acknowledged such works as seem to bear on the advancement of the scientific study of language.

The publicity thus given is regarded as a full return for the presentation of the work. Under no circumstances is it possible to comply with the requests being made by certain publishers for the return of books not reviewed quickly.

Reviews will be published as circumstances permit. Copies of them will be sent to the publishers of the works reviewed.

For further bibliographic information consult the annual list of Exchanges.

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